

MOU/CO-OP ENERGY EFFICIENCY PROGRAMS REPORTING FORM



For: Electric Cooperatives that had retail sales of more than 500,000 megawatt hours in 2005, and Municipally-Owned Utilities

Purpose of this document: As mandated by the 82nd Legislature (2011), beginning April 1, 2012, all electric cooperatives that had retail sales of more than 500,000 megawatt hours in 2005 and all municipally owned utilities must report each year to the State Energy Conservation Office (SECO), on a standardized form developed by SECO, information regarding the combined effects of the energy efficiency activities of the electric cooperative/utility from the previous calendar year, including the annual goals, programs enacted to achieve those goals, and any achieved energy demand or savings goals. [Sections 39.9051 and Section 39.9052 of the Utilities Code].

This form is intended to partially fulfill the reporting requirement. Please provide all the information requested below.

DATA FOR A CONSECUTIVE 12-MONTH PERIOD:

MOU/Co-op: Trinity Valley Electric Cooperative

Beginning: 01 / 01 /2013 Ending: 12 / 31 /2013

CONTACT PERSON (Name & Title): Trevor Moeller Energy Management Advisor

ADDRESS: 1800 Highway 243 East

CITY: Kaufman TX. ZIP75142

Please attach a copy of the detailed report containing the below information.

PHONE:903-264-1167 EMAIL: TREVORM@TVEC.COOP

Energy Efficiency Program	Estimated Electric Peak Demand Savings (kW)	Estimated Electricity Use Savings (kWh)	Estimated Natural Gas Increase From Fuel Switching – If Applicable Specify Units: CCF MCF Therms	Other Program Performance Metric
Res/Comm. Energy Audits(82 in 2013)	Unavailable	Unavailable		
Energy Management Presentations to				
the following organizations:				
-Community Service Workshops: Nine				
per year				
-Agri-Life Child Care Conferences: Twice				
per year				
-Master Wellness Volunteer: Once per				
year				
-Diabetes Organization- Do Well Be Well				
Group: Once per year				
-Kaufman County Leadership Advisory				
Board: Once per year				
-Senior Citizens Groups: Once per year				
in Kaufman, Forney and Terrell				
-Henderson County Master Gardeners				
-Athens Rotary Club				
-Co-op Connections Card				
-Keep Athens Beautiful				

Requirement 2: Energy Efficiency Goals

Trinity Valley Electric Cooperative, Inc.

Kaufman, Texas

BOARD POLICY 403

ENERGY CONSERVATION

I. OBJECTIVE

To establish policy concerning use of energy by the Cooperative and its members, particularly in regard to effectiveness, efficiency, and conservation of energy. This objective is consistent with the utility responsibilities of a full-service cooperative and its prime concern for members needs.

II. POLICY

It shall be the policy of Trinity Valley Electric Cooperative to:

- A. Constantly examine its own use of energy. This includes, but is not limited to, plant engineering design and construction, lighting and climate control and use of vehicles.
- B. Develop and carry out a system-wide program of energy management including energy conservation, adequate home insulation and weatherization, efficient irrigation and other farm and business uses. Alternate energy sources will be appropriately considered.
- C. Develop and carry out an information program so that the need for energy management is understood along with understanding of what each member can do to meet energy use needs most effectively.
- D. Develop and carry out an information and education program with major groups involved in housing, including the building industry and local government organizations, to assure understanding and coordination in methods of energy management.
- E. Develop training as appropriate for all employees.



III. RESPONSIBILITY

The General Manager/CEO shall have responsibility for the implementation of this policy.

Howard Tillison, Board Chairman

February 28, 2012 Date



Requirement 3:Energy Efficiency Programs

Trinity Valley Electric Cooperative does not track estimated energy savings for residential or commercial consumers. We offer to members estimated energy savings in percentages for various energy conservation improvements; however, we do not feel that it is realistic to associate a monetary value to those savings. There are too many factors that affect a members bill to determine how much of a reduced bill was due to energy savings versus other factors such as weather, wholesale power costs, reduced/increased power cost recovery factor, etc.

Requirement 4: Program Materials/Additional Information

Website Information

www.tvec.net

Energy Management 3/28/12 7:49 AM

HOME MEMBER INFO COMMUNITY

LINKS

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New Service

News & Events

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Employee Access

Advanced Metering









MISSION STATEMENT: At Trinity Valley Electric Cooperative, we are committed to our member-owners to deliver safe and reliable electric power at a competitive price, with a strong emphasis on member service, community and sound business practices.



Home ▶ Community ▶ Energy Management

Energy Management

Home Energy Audits

As a special service to our members, we offer free Home Energy Audits. Upon request, trained TVEC personnel will visit your home and offer advice on ways you can improve the management of your energy usage. If you are interested in this valuable service, call our Member Service Department toll-free at 800-766-9576 for an appointment. We will be happy to explain the details

TogetherWeSave

The Department of Energy estimates that by 2035 residential demand for electricity will increase 24% above 2008 levels. We want to work with you to keep your electric bill affordable. Find out how you can save by visiting www.togetherwesave.com

You Have the Power

Download your copy of You Have The Power, a free guide to help lower your utility costs by using energy wisely. This guide will give you all the information you need to manage energy effectively in your home or business. Remember, doing all you can to effectively manage energy use will have a direct impact on your energy costs and quality of life. As a co-op member, that's the kind of power you have. Download your copy here.

Becoming Energy Wise

In this 13-minute video, consumers learn how to reduce their energy costs. The video demonstrates simple, effective improvements to make homes more energy efficient. Contact Bobbi Byford at (469) 376-2234 for more information.

Energy Tips

The following tips will help you make your home safer. more energy efficient and a more comfortable place to live. By following these simple tips, you can be health-wise and energy-conscious.



Set the thermostat from 76 degrees to 78 degrees in the summer months.

Set the thermostat from 68 degrees to 70 degrees in the winter months.

Use fans to circulate air to help stay comfortable.

Use curtains, drapes or blinds to help control the temperature inside your home.

Repair or replace broken or cracked windows.

Change or clean your heating/cooling unit filter once a month.

Run dishwasher and washing machine only when they are fully loaded.

Insulate hot water pipes and ducts wherever they run in unheated areas.

Replace older, inefficient appliances with new energy-efficient models.

Weatherizing

Put a draft stopper along cracks, beneath doors and windows.

Place movable insulation in windows to block heat gain during the summer and keep heat indoors during the winter.

Use caulk and weather stripping around doors and windows to prevent air leakage.

Install inexpensive gaskets around light switches and electrical outlets to seal against air leaks.

Water Heating

Check your water heater thermostat setting. If the thermostat is set between 140 degrees and 160 degrees, or "high", you can reduce the setting to between 110 degrees and 120 degrees, or "medium", and save at least \$20 a year with an electric water heater or \$10 a year with a gas water heater. The lower thermostat setting can also prevent scalding. Look for and repair leaky faucets.

Replace your showerhead with a low-flow showerhead. This can reduce the flow of water from 8 gallons to 3 gallons per minute, and save up to 4,000 gallons of water a year.

Run your dishwasher and washing machine only when they are fully loaded.

Save even more hot water by using a cold water laundry detergent so you can wash and rinse with cold water. Normally, only very greasy clothes need to be washed in warm or hot water.

Lighting

Replace two bulbs with one bulb that produces a similar amount of light. For instance, you could replace 60-watt bulbs with one 100-watt bulb. However, be sure that the fixture is rated to use the higher wattage bulb.

Change to fluorescent lamps wherever possible by replacing the entire fixture or by changing from incandescent to compact, fluorescent bulbs. The initial cost of a compact, fluorescent bulb is more than an incandescent bulb, but it can last up to 12 times longer and produce less heat, which will reduce the load on your air conditioner.

Cooking

Cook several foods at one time when using your oven. Prepare dishes that can be stored or frozen for later use.

Bake food in glass pans. Glass pans allow you to reduce the oven temperature by 25 degrees.

Use small cooking appliances, such as deep fryers, electric skillets, toaster ovens, microwave ovens and pressure cookers.

These appliances use less energy than your range or oven.

Match the size of the pan to the heating element when cooking on the stove. More heat will get to the pan and less will be lost to the surrounding air.

Place lids on pots when cooking to retain the heat. This will help your food cook faster and keep vitamins from going up in steam.





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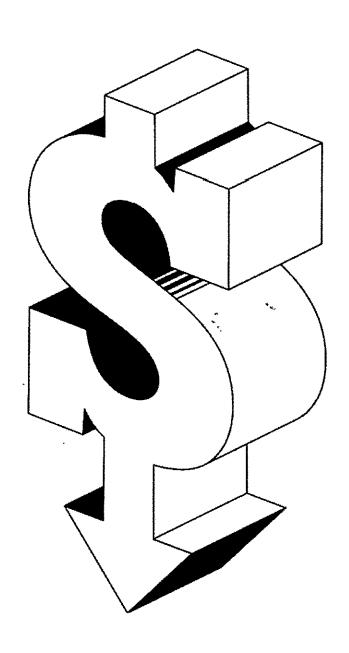
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POWER



A Guide to Lowering Utility Costs by Using Energy Wisely

One of the best things about being a member of an electric cooperative is that you have the power to directly affect what you pay for energy.



When all co-op members make the effort to manage their energy use more effectively, the result is that the co-op ultimately doesn't need to buy as much energy to serve members' needs. That means that the cost of energy comes down for everyone in the co-op. Not only that, you'll also be helping to reduce your co-op's dependence on power generated by fossil fuels. That means cleaner air for everyone.

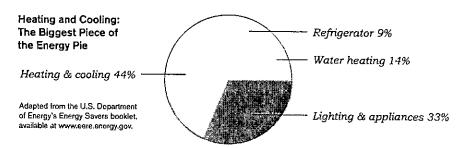
This guide is designed to give you all the information you need to manage energy effectively in your home or business. You'll learn how to make the most efficient use of energy in everything from heating and cooling systems to lighting and appliances. There are tips on saving energy in small ways every day, as well as detailed information about taking energy efficiency into account when it's time to replace major appliances or if you're undertaking a major home renovation.

Remember, doing all you can to effectively manage energy use will have a direct impact on your energy costs and quality of life. As a co-op member, that's the kind of power you have.

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Heating and Cooling

Because you spend the largest portion of your energy dollars staying warm or cool, you'll save the most on energy by taking steps to use your heating and cooling systems more efficiently. Follow the tips on the next few pages, and you can reduce your heating and cooling bills by as much as 50 percent.



Simple Steps You Can Take to Save on Heating and Cooling

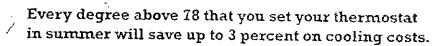
There are many simple, low-cost (or no-cost) things you can do every day to reduce your use of energy for heating and cooling, such as setting your thermostat appropriately or using ceiling fans to circulate heated or cooled air more effectively.

Set Your Thermostat on "Savings"

The single best way to reduce heating and cooling costs is to set your thermostat at 78° or higher in summer and 68° or lower in winter. If you're keeping your thermostat at 72° in the summer, consider this: According to the U.S. Department of Energy, raising that setting to 78° could save you up to 47 percent on cooling costs.

You'll save additionally by greater adjustments to your thermostat (higher in summer, lower in winter) while you are away from home or asleep. When you return or wake up, don't set it at an unnaturally lower or higher setting to try to cool or heat the house faster. That doesn't work; it just cools or heats the house more than you need, which uses more energy.

Do keep in mind that if you have an infant or an older person living in your home, they may require cooler or warmer temperatures to stay healthy. Use your common sense.

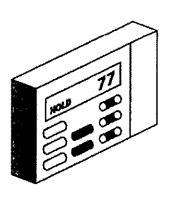


Consider the Alternatives

The principle is simple: It's a lot cheaper to move air around than it is to heat or cool it. With that in mind, consider these ways to stay cool in summer and warm in winter without depending entirely on your central system.

In the heat of the summer, use fans to circulate cooled air while you keep the thermostat at a higher setting.

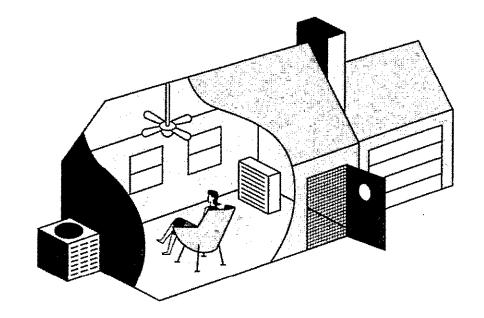
If you live in a part of the state with low humidity, consider an evaporative cooler as an alternative to central air conditioning. Evaporative coolers use water evaporation to cool the air and a fan to circulate it.



Programmable Thermostats

For maximum energy efficiency in heating or cooling, use a programmable thermostat to automatically adjust the setting when you leave the house or go to bed and then turn it back to normal when you return or wake up. Programmable thermostats range in cost from \$45–\$100+, but can easily pay for themselves in energy savings.

There are many options for heating and cooling your home. During temperate weather, consider leaving windows and doors open if you feel safe doing so. Use floor and ceiling fans to circulate air. For maximum cooling, use the central system supplemented by fans, and lower window shades to keep out the sun. For maximum heating, use the central system supplemented by fans, and open shades to take advantage of the sun's rays.



In spring and fall, when it's not particularly hot or cold, a whole house fan can be an excellent alternative to your central system. Installed in the ceiling, a whole house fan draws outdoor air inside to cool the house.



Use pleated instead of mesh filters in your central air-and-heat system for better filtration.

Get Your Ducts in a Row

Are the air ducts in your home delivering all the warmth or cooling your system is generating—or are they losing it due to poor performance? Here's what you can do to make sure your ducts are working properly and delivering the conditioned air you're paying for.

Be sure your ducts aren't leaking. You or your service professional will be looking for:

- · Obvious holes in the ducts.
- Dirty spots on the duct insulation and around air vents.
- · Areas where connections have become separated.

If you find only a few problem areas and you're a do-it-yourselfer, you can repair and seal them with duct tape. Just be sure to use tape with the Underwriters Laboratories (UL) logo on it to avoid tape degradation or cracking over time. However, if you find that your ductwork is very poorly insulated or has extensive leakage problems, call a service professional.

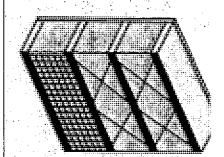


In winter, set your ceiling fan to turn clockwise to send warm air downward into the room. In summer, set it to turn counter-clockwise to circulate cool air through the room.

Attic Insulation

- Measure carefully to be sure you buy the correct amount of insulation.
- Get the right stuff. Choose batts or blankets to fit between joists, and use rolls or blankets on the attic floor.
- Install a vapor barrier of thick plastic sheeting if you choose insulation in the form of "faced" batts or blankets.
- Follow the product instructions and wear proper protective gear when installing insulation.
- Have attic vents installed along the ceiling cavity; this will ensure proper airflow from soffit to attic to control moisture and maintain the insulating power.

In a multi-story building, lightweig) fencing (left) or wire lacing (right) retains insulation between floors.



Regular System Maintenance

Like any other mechanical device, a central heating and cooling system will only work well if it's regularly maintained. That means keeping the system properly "tuned" with regular professional checkups, frequent filter cleanings or replacements, and periodic observation of both the inside and outside units.

Home Improvements That Can Save You Plenty

Energy-related home improvements may not be as inexpensive as buying a fan or as simple as scheduling a system checkup, but they can be well worth the expense or time they require.

Save With a Heat Pump

Like standard systems, heat pumps can meet your heating and cooling needs in one unit. The difference is that a heat pump will heat for significantly less cost than a typical electric resistance-heating unit. There are two types of heat pumps available today.

- Air-source heat pumps draw heat from the air outside to heat your home in winter, and expel heat outside to cool your home in summer. An air-source heat pump may reduce your heating costs by up to 50 percent if you convert from an electric furnace to an all-electric air-source heat pump. Generally, the colder it gets where you are, the less the savings, since the colder the air outside, the more difficult it is to extract heat from it.
- Ground-source heat pumps (also known as geothermal or earth-energy systems)
 make use of the earth's ability to store natural heat. They pump heat from deep in
 the earth into your home rather than taking it from the air. A ground-source heat
 pump may cost more than a conventional system, but the energy savings could pay
 for the unit in three to five years.

Be Good to the Planet and Your Pocketbook: Go Solar

Using passive solar energy to heat and cool your home can cut your heating costs by more than 50 percent and help reduce your cooling costs, too. If you're building a new home or doing a major renovation of your existing home, consider passive solar techniques such as:

- · Placing larger, insulated windows on south-facing walls for more efficient heating.
- Improving heat transfer by locating thermal mass, such as a concrete slab floor or heat-absorbing wall, close to windows.
- Using reflective coatings on windows, exterior walls and roof to keep out heat in summer.
- Installing strategically designed overhangs to shade the house from summer sun.

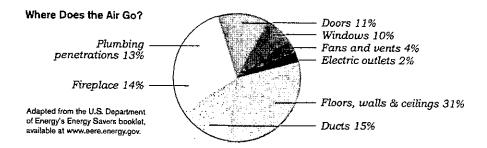
Keep the Air Inside Where It Belongs

If your heating and cooling dollars are going out the window due to air leaks in your house, you need to caulk, weather-strip and insulate.

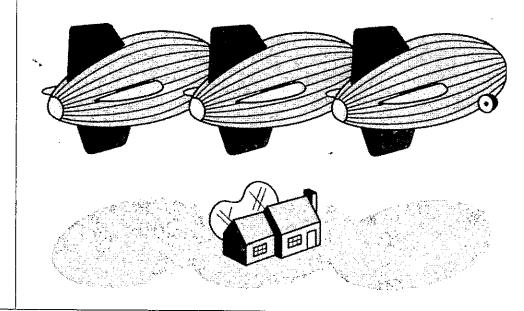
Caulking, or filling cracks and gaps in your home will eliminate air leakage around doors and windows as well as in areas where plumbing, ducting or electrical wiring penetrates the house. Weather-stripping is also useful around doors and windows that leak air.

Insulation creates a barrier of resistance to keep heat from escaping in winter or coming in during summer. The "R-factor" assigned to different types of insulation refers to the level of resistance. Different R-factor ratings are appropriate for different parts of the state, so check with your co-op and a local insulation dealer to see what's right for you.

The best place to start insulating is the attic. That's because heat tends to rise and is therefore more likely to be lost or gained through the highest part of the house. The attic is also one of the easiest places to install insulation.



More than 600,000 cubic feet of air passes through the older Texas house daily. That's enough to fill three Goodyear blimps every 24 hours.



Let the Sunshine In (But Only in Winter)

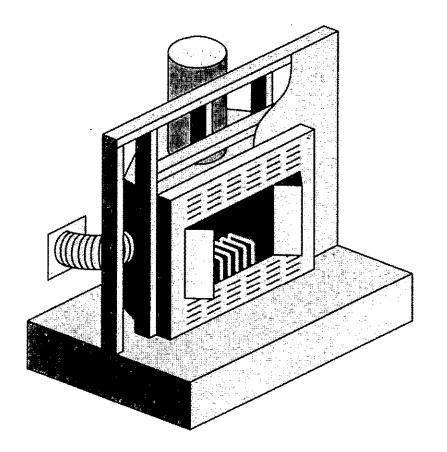
The U.S. Department of Energy estimates that one-fourth of the energy used to cool and heat your home is lost through windows.

Things you can do inside:

- Use lined draperies, opaque roller shades or special thermal shades on windows.
- Choose carpeting over fibrous padding for optimal heat gain or loss.
- Use fabric or woven wall coverings.

Things you can do outside your home to reduce energy loss:

- Consider installing storm windows and double-pane windows, which are at least twice as effective as single-pane windows.
- When you do spring planting, choose deciduous greenery for the south and west sides of your house that will leaf out and block the sun in summer—but lose its leaves and let in warming rays in winter.
- Consider the new solar panels that can absorb and dissipate up to 70 percent of the sun's heat and glare before it reaches the windows. They are easy to install and can be removed in winter.



Keep your fireplace damper closed unless a fire is going. Leaving the damper open is like throwing open a 48-inch window. The damper should be well sealed. It's best to cover the firebox opening with metal or glass doors, which will restrict the amount of heated air drawn from the house.

Keep the Home Fires Burning Efficiently

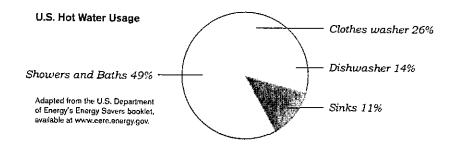
As much as 30 percent of your conditioned air could vanish right up the chimney. That's because a fireplace needs air to keep the fire burning—and it gets that air from inside your home, where you've already paid to make the air warm. Take these steps to improve fireplace efficiency:

- · Cover the firebox opening with tight-fitting metal or glass doors.
- Have a tight-fitting flue damper with an accessible handle; keep the damper open when the fireplace is in use and closed when it's not.
- Use a combustion air intake with a tight-fitting damper to draw air from outside into the firebox.
- · Keep ash box clean, especially if outside, to provide air source.
- Use well-aged firewood, which burns hotter and cleaner.
- Caulk around the hearth.
- Plug and seal the chimney flues of unused fireplaces.

Stay Out of Hot Water

Water heating accounts for a sizable part of your energy bill—about 14 percent. Fortunately, there are a number of things you can do to ensure that you have plenty of hot water without wasting energy in the process.

Start by thinking of ways to use less hot water. Take showers instead of tub baths, for example. Or install low-flow showerheads and faucets. You can also reduce your energy consumption for water heating by turning down the water heater thermostat. (A setting of 120 degrees will provide a comfortable water temperature for most uses.) And you can insulate your hot-water storage tanks and pipes to reduce heat loss.



Heating and Cooling in a Nutshell

- Set the thermostat at 78 degrees in summer, 68 degrees in winter.
- Consider alternatives such as fans to take the load off your central system.
- Have your system serviced regularly for efficient operation.
- Clean or replace filters regularly.
- Keep ducts in good repair to avoid air leaks.
- Caulk, weather-strip and insulate.
- Install storm windows and double-pane windows.
- * Landscape with plants that will block the sun in summer and let it in during winter.
- Choose window coverings, carpet and wall coverings with energy efficiency in mind.
- Take steps to minimize air loss through the fireplace.
- Lower the water heater thermostat to 120 degrees.

Appliances

The energy costs to operate everyday appliances such as refrigerators and freezers, ranges and ovens, washers and dryers, and dishwashers account for about 20 percent of your electric bill. You can reduce these costs by using appliances efficiently and by looking for high-efficiency choices when it's time to buy new ones.

Tips for Using Appliances Efficiently

Refrigerators and Freezers

Keep it clean. Regularly defrost models that aren't frost-free, and clean the condenser coils of your refrigerator three or four times a year.

Shut the door. Don't stand in front of an open fridge contemplating the contents. Decide what you need before you open the refrigerator, then get what you need and shut the door.

Fill the freezer. A freezer that's two-thirds to three-quarters full requires less energy to operate than an empty one. If you don't have enough food to fill the freezer, add some water-filled plastic milk cartons or soda bottles.

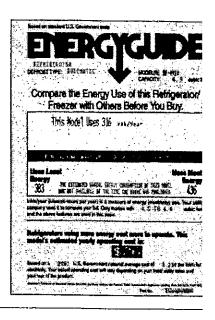
Test the seals. Fold a paper towel, shut the refrigerator door on it and then pull the towel out of the closed door. If there's no resistance, you probably need new seals around the door to keep the cold air in.

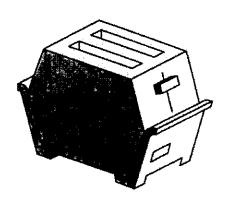
Maintain the right temperature. Optimum refrigerator temperature is 38 to 42 degrees. For the freezer, it's 0 degrees or higher (although not higher than the freezing point of 32 degrees, obviously).

SEER: We Spell It Out for You

When buying a new central system or heat pump, check the unit's SEER (Seasonal Energy Efficiency Ratio) number. The higher the SEER, the more efficient the unit's performance

Pay Attention to the EnergyGuide
Label. It includes the estimated
energy consumption in kWh on a
scale with similar appliances and
the estimated yearly operating cos
based on the national average cos
of electricity.





How Much Are You Paying to Run Your Appliances?

To determine how much electricity an appliance uses, follow these steps:

- Find the wattage of the appliance. (It's usually listed on the serial number plate.)
- 2. Estimate the hours per month that you use the appliance.
- Multiply the wattage by the hours of use per month. Divide the result by 1,000 to get your total monthly kilowatt-hour (kWh) usage for the appliance.
- Figure out your average monthly cost per kWh by dividing your total monthly electric bill by the number of kWh used. (kWh used will be listed on the bill.)
- Determine your monthly energy cost for the appliance by multiplying the kWh usage by your cost per kWh.

Electric Ranges and Ovens

Keep it covered. Use pan lids to retain the heat in the pan. Remember that water boiled in a covered pan comes to a boil faster.

Use the right pan. Don't waste energy by using a pan or pot that is too small for the burner, or that is too large or heavy for the amount or type of food you are cooking.

Turn off burners sooner. Because electric burners stay hot for a while after they're turned off, you can turn the burners off several minutes before the allotted cooking time. The food will finish cooking without using more electricity.

Preheat selectively. Baked goods may require a preheated oven to come out just right, but other foods don't. There's no need to preheat when you're cooking a main dish or heating a casserole.

Use heat-conducting cookware. Ceramic, glass and stainless-steel cookware conduct and retain heat better, which means that you can reduce the oven temperature by 25 degrees when you use them.

Close the door. The oven loses about 25 degrees of heat every time you open the door. Use a timer to gauge doneness instead of opening the oven door every few minutes to check.



A toaster oven uses a third to half as much energy as a full-sized oven, which makes it a great choice for small meals and snacks.

Washers and Dryers

Don't run small loads. Wait until you have enough laundry for a full, large load.

Sort by wash temperature. Use hot water only for whites and hard-to-clean items. Wash everything else in warm or cold water to save on water heating costs.

Pretreat stains. The more you can do to remove stains and heavy soil before you wash, the less likely you'll have to wash an item a second time.

Shorten the wash cycle. Cutting washing time from 15 to 7 1/2 minutes will save about 25 percent of the electricity needed to run the washer.

Fill the dryer. Don't waste electricity by drying just one or two items.

Dry heavy items separately. Dry heavy items like towels in a separate load from lighter-weight items that don't need as much drying time.

Don't over dry. Use the cool-down cycle to allow clothes to finish drying with the residual heat in the dryer. If your dryer has a moisture sensor that automatically shuts off the machine when clothes are dry, use it.

Install a vent/filter kit. This will allow you to vent clean, warm air from your clothes dryer into your home during winter, recycling heat that would otherwise be wasted.

Use a clothesline. Anytime you can dry clothes outside instead of in the dryer, do. That's free solar energy!

Dishwashers

Run a full load. Don't run your dishwasher when there are only a few items in it.

Shorten the cycle. Keep the dishwashing cycle as short as possible. Don't use a long "pots and pans" cycle if you're only washing plates, glasses and silverware.

Air-dry dishes. Skip the drying cycle to reduce the amount of electricity needed to run the dishwasher.



It takes less water to wash a load of dishes in the dishwasher than to wash them by hand—approximately 9.9 gallons compared to an average of 15.7 gallons.

Buying New? Put Energy Efficiency First

There's plenty of consumer information available to you today to help you make the most energy-efficient choices when purchasing new appliances. (See sample EnergyGuide label on page 7.)



When buying a new freezer, choose a chest-style freezer instead of an upright model. Chest-style freezers retain cold air better when the door is opened.

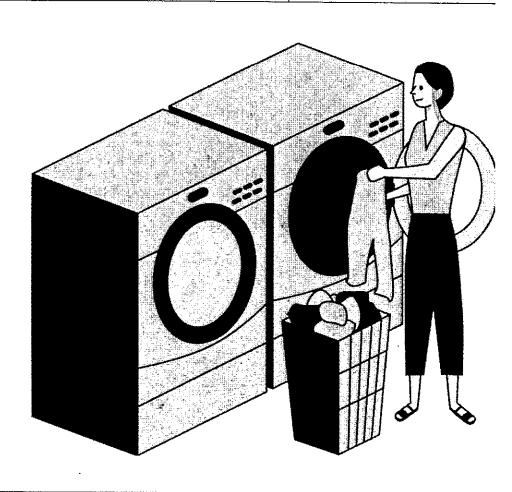
Front-loading washing machines use:

40 to 60% less water

30 to 50% less energy

50 to 70% less detergent

than top-loaders.

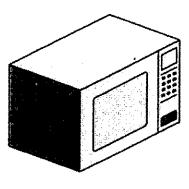


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Microwaving Makes Sense

Reduce your energy bills for cooking by using your microwave instead of your range or oven when you can. Microwave ovens use less energy than traditional appliances, and they don't heat up your kitchen.



Look for the Energy Star

Appliances that receive an Energy Star rating from the U.S. government are among the most efficient available today. They may cost more to purchase, but they will also cost less to operate over the time you own them.

- An Energy Star washing machine may use about a third of the energy and less water than other machines.
- Most Energy Star washers remove more water from your clothes during the spin cycle, so the clothes don't take as long to dry in the dryer.
- An Energy Star refrigerator can save \$35-\$70 a year compared to older models.
 That adds up to \$525-\$1,050 over the average 15-year life of the unit.
- Energy Star dishwashers use less water and energy, and must exceed minimum federal standards for energy efficiency by at least 25 percent.

Appliances in a Nutshell

- Consider lower-cost cooking alternatives such as toaster ovens and microwaves.
- · Know how to read an EnergyGuide label.
- Look for the Energy Star to find highly energy-efficient new appliances.



Home Electronics

While individual energy consumption of home entertainment systems, computers and other home electronics may be relatively low, the cost can add up.

Unplug to Save

When you're away from home for the weekend or longer, don't just turn off your TV, . DVD player and cable box. Unplug them. As long as these and other small electronics are plugged in, they'll draw power to operate timer displays and other functions that stay on even when the device is switched off. You won't save a fortune—from \$.25-\$3 a month per device—but every little bit counts.

Protect Against Power Surges

This simple step isn't about lowering your electric costs for home electronics. It's about avoiding the big hit you'll take if a power surge destroys your DVD player or other small electronics. Power surges are slight changes in voltage that happen during storms or other electrical events. They can damage the sensitive circuits inside electronic devices. To protect against them, plug your electronics into a surge protector.

Take Advantage of Built-In Computer Features

If you have a computer that runs on Microsoft Windows, use the power management controls to put your computer to sleep after it idles for a specified period (adjustable from five minutes to more than an hour). The hibernation mode reduces the amount of power the computer uses (up to 300 watts at full power) to 15 watts or lower. In addition, some of the newest computers available have a feature called IAPC (Instantly Available PC) that sends the computer into a sleep mode of less than 8 watts—and then allows it to go right back to where you left off instantaneously when you turn it back on.



Don't confuse a power strip with a surge protector: A power strip offers no protection from power surges.

Home Electronics in a Nutshell

- When you're away for extended periods, unplug small electronics.
- Invest in a surge protector to keep power spikes from harming electronics
- Take advantage of your computer's power management controls.
- Consider a flat-panel monitor for energy savings.

Gives New Meaning to "Flat Rate"

Been wanting a sleek, new flat-panel computer monitor—but worried about the high price? Does it help to know they use only about a third of the energy of a traditional monitor? You may pay more for one initially, but the savings over time are likely to make up for that.



Lighting

Go fluorescent. A 25-watt fluorescent light will generate as much light as a 100-watt incandescent bulb for one-fourth the energy. Fluorescent lights cost more to buy, but far less to operate. They last longer, too.

Turn out the lights. Don't waste energy by leaving lights on when you're not using them. Consider installing timers or sensors to reduce the amount of time your lights are on.

Use task lighting. Focus the light where you need it for reading, studying, sewing and other tasks, rather than just brightly lighting the entire room.

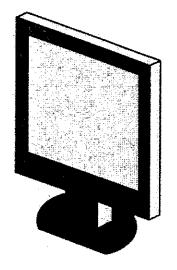
Avoid long-life incandescent bulbs. They are the least efficient of all incandescent light bulbs.

Buy fixtures with fewer bulbs. A 100-watt bulb glows with nearly 50 percent more light than four 25-watt bulbs.

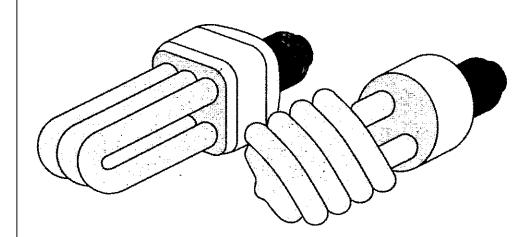
Look for the Energy Star. Light bulbs and light fixtures are eligible for the Energy Star rating. Energy Star lighting uses two-thirds less energy and lasts six to 10 times longer than traditional lighting.

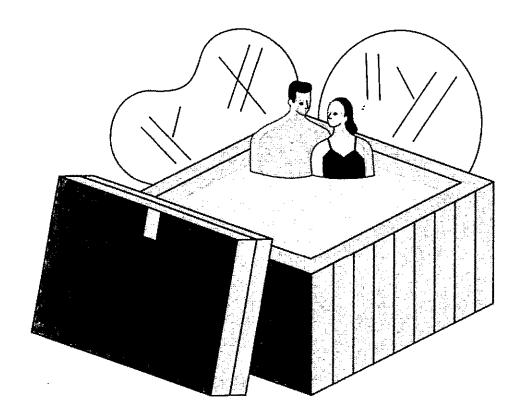


Replace 25 percent of the incandescent lighting in high-use areas with fluorescent lighting, and you'll save about 50 percent on the lighting portion of your electricity bill.



Fluorescent lighting is four times more efficient than incandescent lighting.





Timers, covers, solar heating, lower temperature settings and insulation reduce the cost of using spas. 4



Pools and Spas

Relaxing in your pool or spa is even more enjoyable when you know it's not costing you a fortune to operate. A few simple steps can make a big difference in the energy cost to heat and circulate the water in your pool or spa.

Use a timer. A timer on the pool pump will make it easier to reduce the running time to only what it takes to keep the water clean and sanitary.

Keep it covered. Cover your spa with a tight-fitting, insulated cover when not in use.

Lower the temperature. Reduce the temperature or turn off the pool or spa heater between uses.

Consider solar heating. It's a much more affordable way to heat your pool than traditional electrical resistance heating.

Look for good insulation. When purchasing a new pool or spa, look for insulation that has been applied directly to the fiberglass or wood that holds the water. This type of insulation reduces heat loss and helps maintain water temperature.

Together, We Can Keep Energy Costs Under Control

Your electric cooperative is dedicated to delivering energy and energy solutions to you safely, dependably and at a reasonable cost. As a co-op member, you have the power to help keep that cost under control. When you use the information in this booklet to use energy efficiently in your home or business, you play an important part in reducing energy demands and controlling your co-op's energy costs. Thanks for taking the time to learn more about action you can take, and thanks for doing your part.

Resources

Air-Conditioning and Refrigeration Institute, www.ari.org

The Alliance to Save Energy, www.ase.org

American Architectural Manufacturers Association, www.aamanet.org

American Council for an Energy-Efficient Economy, www.aceee.org

American Society of Landscape Architects, www.asla.org

American Solar Energy Society, www.ases.org

Association of Home Appliance Manufacturers, www.aham.org

Cellulose Insulation Manufacturers Association, www.cellulose.org

Efficient Windows Collaborative, www.efficientwindows.org

Energy Star, www.energystar.gov

Federal Trade Commission, Bureau of Consumer Protection, www.ftc.gov

Insulation Contractors Association of America, www.insulate.org

National Arbor Day Foundation, www.arborday.org

National Association of Home Builders, www.nahb.org

National Association of State Energy Officials, www.naseo.org

National Insulation Association, www.insulation.org

North American Insulation Manufacturers Association, www.naima.org

Polyisocyanurate Insulation Manufacturers Association, www.pima.org

Rocky Mountain Institute, www.rmi.org

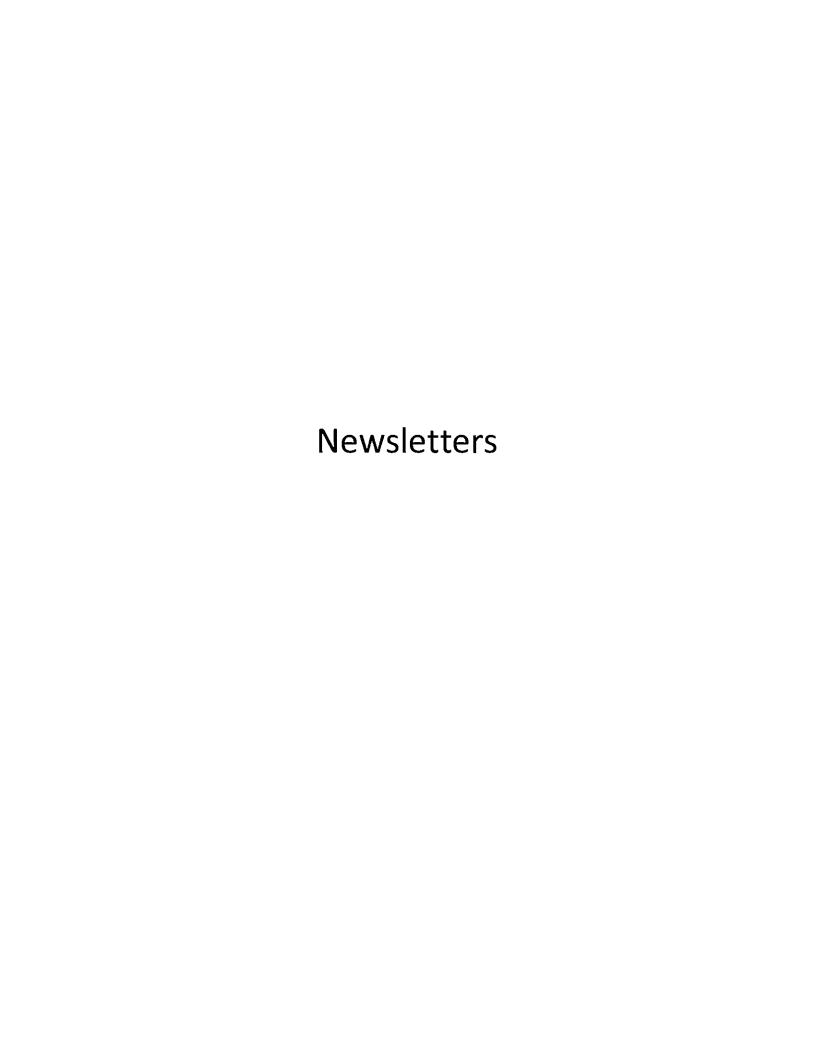
Solar Energy Industries Association, www.seia.org

Solar Rating and Certification Corporation, www.solar-rating.org

Texas Electric Cooperatives, www.texas-ec.org

U.S. Department of Energy's Energy Efficiency and Renewable Energy portal, www.eere.energy.gov

Window and Door Association, www.wdma.org



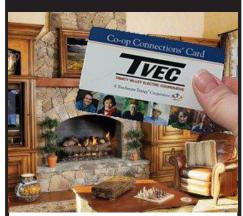
TVEC.NET on the Move

Get where you need to go with the touch of a finger. Don't wait to read the latest news, pay your bill, or even apply for new service.

TVEC's website is now mobile friendly and allows for faster load times with the less is more attitude. But if your preferred choice is the full desktop version of tvec. net, it is still accessible from the mobile website.



Where is your Co-op Connections Card?



He's been enjoying the cozy warmth of his home this chilly winter. And thanks to Nelson Propane Gas he received a discount when he purchased the propane.

Check out more local discounts at tvec.net and stay tuned, you never know where he'll be spotted next month.

WIN \$25 JUST FOR READING

Somewhere, hidden in this newsletter, is a TVEC account number. Read closely, if the account number is yours, contact the Member Services Department by February 15, 2013 to receive a \$25 credit on your electric bill. Don't miss out – you could be a winner.



Member Services with a Click

Staying in touch with TVEC just got easier. With the click of a mouse, member services is at your fingertips with the new online, live chat. Have a question about your bill, payments, security lights, even new service? No problem. Live chat is just one more way we are here to serve you. To take advantage of this new service go to tvec.net and click on "Manage My Account", then select "Live Chat" from the Member Service Portal homepage.



Home Energy Audits Available

As a special service to our members, TVEC offers free home energy audits. Upon request, trained TVEC personnel will visit your home and offer advice on ways you can improve the management of your energy usage. If you are interested in this valuable service, call our office today for an appointment. We will be happy to explain the details.

www.tvec.net



Your heat pump can use 10 percent to 25 percent more energy if it's not properly maintained, which includes regularly checking and replacing the air filter when it's dirty to keep parts from working too hard or even becoming damaged. Keep brush and plants tidy around the outdoor unit, and dust the return registers inside. For more details on heat pump maintenance, visit EnergySavers.gov.

Source: U.S. Department of Energy

Trucks to be Auctioned

TVEC will be sending three 1-ton service trucks with utility beds and two commercial generators to auction. The auction will be held on January 31, 2013 in Waxahachie by J.J. Kane Auctioneers.

Online bidding is available but you must be registered prior to the auction start. For more information please visit jjkane.com. 60124111001

Electrical Safety Calendar

Use this handy calendar to help keep your home safe. For more tips, visit esfi.org.

JANUARY

☐ Check and replace furnace filters

FEBRUARY

☐ Vacuum refrigerator coils

MARCH

☐ Replace smoke and carbon monoxide alarm batteries if not done in last 12 months

APRIL

☐ Check and replace furnace filters

MAY

☐ Clean air conditioners or schedule annual inspection ☐ Vacuum refrigerator coils

JUNE

☐ Dust light fixtures/lamps

☐ Schedule annual inspection of gas-powered dryer

JULY

☐ Check and replace air conditioning filters

AUGUST

☐ Vacuum refrigerator coils

SEPTEMBER

☐ Schedule annual furnace cleaning and inspection

OCTOBER

☐ Check and replace furnace filters

NOVEMBER

☐ Vacuum refrigerator coils

DECEMBER

☐ Dust light fixtures/lamps

ESFI recommends hiring a licensed, qualified home electrical inspector if:

Your home is more than 40 years old; your home had a major addition or renovation or major new appliance added in the last 10 years; and/or you are the new owner of a previously owned home.

Every month you should:

1. Inspect all electrical and appliance cords for damage

2. Test GFCIs & AFCIs

Whether you have a receptacletype or circuit breaker-type
ground fault circuit interrupter
(GFCI), pushing the TEST button
should turn off power to the
circuit. To restore power, press the RESET
button. To test arc fault circuit interrupters
(AFCIs) push the TEST button. The breaker
handle should go to the middle or off position.
To reset, move the breaker handle to the OFF
position and then to the ON position.

3. Test smoke and carbon monixide alarms

Push the TEST button or use other procedures recommended by the manufacturer. Smoke alarm batteries should be changed at least once a year. If an alarm "chirps" or "beeps" to indicate low batteries, change them right away.

Replace all smoke alarms at least every 10 years.



Your kitchen can yield big energy savings. Check the refrigerator door seal for a tight fit. Run only full dishwasher loads, and use the microwave rather than oven to reheat food and make small meals. Finally, unplug small appliances when not in use—many draw power even when turned off. Find more ways to save at TogetherWeSave.com.



Winter Storm Safety

Snow and ice storms are an inevitable part of the winter season. However, they can lead to downed power lines and outages. Remember the following tips to stay safe and warm should you find yourself in the dark after a severe winter event:

- Never touch a fallen power line, and assume all wires on the ground are electrically charged. Call TVEC to report it immediately. Avoid contact with overhead lines during cleanup and other activities.
- In the event of an outage, an alternate heating source—such as a fireplace, propane space heater, or wood stove—may be used. Extreme caution should be taken.
- Plan to stay in an area of the home where the alternate heat source is located.
- Fuel- and wood-burning heating sources should be vented. Be sure to follow manufacturer's directions.
- Make sure carbon monoxide detectors and smoke detectors are working properly.
- Do not use a gas-powered oven for heating. A gas oven may go out or burn inefficiently, leading to carbon monoxide poisoning. 16166002
- Do not use a gas or charcoal grill inside the home.
- If you use a portable generator to power a heating source, be sure the gen-

erator is located outside your house for proper ventilation. Do not use a generator in an attached garage.

- Take care not to overload a generator. Use correctly sized extension cords to carry the electric load. Make sure the cords have a grounded, three-pronged plug and are in good condition.
- Never connect generators to power lines. The reverse flow of electricity can electrocute an unsuspecting utility worker.

Ideally, your family will stay warm until the power comes back on. But keep an eye on family members for signs of hypothermia, which include shivering, drowsiness, and mental and physical slowness. The elderly and young children are particularly vulnerable to hypothermia. Call 911 immediately if you notice these symptoms. At least one telephone in the house that does not depend on electricity should be available in the case of a power outage.

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Outdoor Safety For Kids



As the weather begins to warm up, kids will soon return to playing outside. Before they do, remind them to look up and be alert for power lines and other electrical hazards.

"Here at TVEC, using proper procedures and safety measures is a matter of life and death," explained Danny Belcher. "We take safety seriously at home, too. Accidents happen, but if we educate ourselves and our children, we can keep them to a minimum."

- Never fly a kite on a rainy day or anywhere but an open space. A high point in the sky makes a kite a grounding point for lightning, and kites could easily become tangled in power lines.
- Don't climb trees that are near power lines and poles.
- Stay far away from power lines lying on the ground. You can't tell if electricity is still flowing through them. If there's water nearby, don't go in it. Water is the best conductor of electricity.
- Obey signs that say "danger" and "keep out" around large electrical equipment, including substations. These signs aren't warnings; they're commands to keep you safe.
- Never climb a power pole.
 Lingering winter storms and the
 onset of spring storms can bring
 down power lines and poles. When
 outdoor activities begin, remember
 to stay away from downed lines.
 64515557002

If you should come across a downed power line, keep people and animals away from the area and call TVEC immediately at 1-800-766-9576.

Lane, Byford Receive Promotion

Jeff Lane was named chief communications officer in January. Lane has been with TVEC for 24 years. He has served in many different areas at the cooperative, including the Information Technology and Engineering departments, and most recently as the manager of communications. He brings to the table many years of experience with up-to-date technology and innovations. Lane resides in Kaufman with his wife, Kathy. They are the parents of Cade, Clay and Chad.

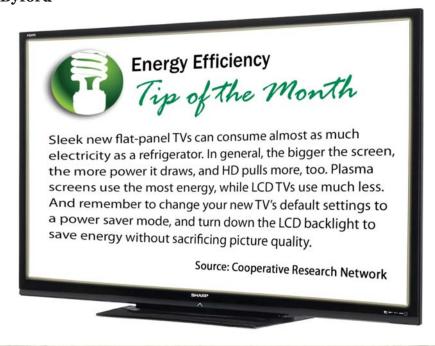


Lane



Bobbi Byford was named manager of public relations in January. Byford has been with TVEC for 23 years. She has served in the Member Relations and Public Relations departments during her long tenure. She is an active member of area chambers and charitable organizations. She provides a wide variety of knowledge of public relations and community service. Byford resides in Wills Point with her husband, Larry, and is the proud "BB" to Alexis and Granger.

Byford







The Business of Energy Efficiency

MESSAGE FROM
GENERAL MANAGER/CEO JERRY BOZE

Energy efficiency isn't a new concept for electric co-ops. Nationally, we're known as leaders in helping our members better manage their electric use.

TVEC is no exception. We offer free energy audits, energy-efficiency education programs and online services and tools to help save you money and our planet.

And most of our fellow co-ops provide similar services. Surveys by the National Rural Electric Cooperative Association, our national service organization, found that 93 percent of electric co-ops educate those they serve about energy efficiency through publications like the one you're reading right now, bill inserts and TV ads. Nearly 80 percent perform residential energy audits, which help to identify ways you can boost the energy efficiency of your home to keep electric bills affordable.

Investing in energy efficiency also includes what we do here at TVEC. We're recycling old metal and meters, making an ongoing effort to serve you better through technology and innovation.

We're not alone in these investments either. Co-ops across the country are upgrading power lines, replacing transformers and installing advanced metering infrastructure to increase efficiency of their operations.

Of course, when it comes to efficiency, much more can be done. According to a study by the Electric Power Research Institute, Americans could save 236 billion kilowatthours by 2030 if utilities everywhere adopted simple energy-efficiency initiatives. That's five times the amount of electricity New York City uses in one year.

It's easy for you to get started on the path to energy efficiency. Call or visit us at tvec.net to learn more about our energy-efficiency programs and services. You can also visit TogetherWeSave.com and discover how making little changes around your house can result in big savings on your energy bills.

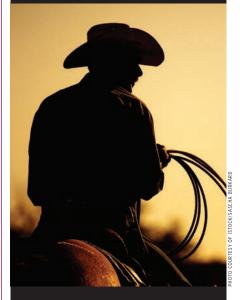
Helping you keep electric bills affordable is just another way those of us at TVEC are looking out for you.

Love Your Planet! Earth Day is April 22

Celebrate the day by making a single, earth-friendly change in your home.

Perhaps the simplest change you can make is to replace your incandescent lightbulbs with energy-efficient compact fluorescent lights or light emitting diodes.

The Round Up® Begins April 1.



Operation Round Up® officially begins on April 1. Members may opt out of the program simply by contacting a TVEC representative at 1-800-766-9576.

Find out what Operation Round Up® can do in your community by visiting tvec.net.

Advanced Metering Status

TVEC is installing advanced meters to improve reliability, efficiency and service.

Deployment ramped up in March when crews installed approximately 3,500 meters east of Kaufman. Crews moved to Henderson County at the end of March to the following areas: Gun Barrel City, Caney City, Athens, Eustace and several miles east of Highway 175 between Athens and Eustace. At the end of April, crews will move to Van Zandt County and install meters

south of Canton along Highway 19 for about eight miles. Also included will be meters along FM 2909 and some meters along FM 858 and FM 1653.

The full project map—as well as much more information regarding the AMI project—can be found on our website, tvec.net, on the Advanced Metering page. If you have any questions or concerns, please give us a call at 1-800-766-9576.



Youth Tour Winners

Every year, seniors, juniors and sophomores from area high schools are given the opportunity to attend the annual Electric Cooperative Youth Tour. Youth Tour provides students an educational experience of a lifetime to visit Washington, D.C., and tour places such as the Washington Monument, the Lincoln Memorial and many more historic venues. The tour introduces students to our country's past, present and the future.

This year's winners of the Youth Tour contest are Preston Roberts of Wills Point and William Beck of Mabank. Roberts, a senior at Wills Point High School, is the son of John and Nancy Roberts. Beck, a junior at Mabank High School, is the son of Patrick and Kelly

The winners were selected by a panel of independent judges from electric cooperatives around the state. They will depart from Texas in June and join hundreds of other students from around the nation for a history lesson they won't forget. To find out more about the Youth Tour, please visit tvec.net.



Spring Chore Safety

Whether you're pruning a tree, making roof repairs, operating farm equipment or installing an antenna or TV dish, steer clear of overhead power lines.

Making contact with a live wire can damage your equipment. If you're touching that equipment when it makes contact, it can seriously injure or even kill you.

- If it looks like you or your equipment will come within 15 feet of any power line, make a new plan. Any closer is too close to operate safely. 60140099001
- · Assume any wire you see is a live electrical line. Do not assume the wire is a telephone or cable line. Call TVEC to make absolutely sure. Do not touch a branch if it is touching a wire. If the wire breaks, assume it is energized and can injure or kill you. Report the problem to TVEC and keep everyone away from it until help arrives.
- If you're using a ladder, keep it far enough away from all power lines that it won't touch one if it falls over. The Consumer Product Safety Commission reports that ladders contacting power lines cause 9 percent of electrocutions each year.
- Take the day off if it rains. Climbing ladders and working with big equipment in bad weather is an invitation for you to lose your footing and knock something—or yourself—into a power line.

Making your home safe and energy efficient is important, but keeping yourself safe from hazards is more important. Please call 1-800-766-9576 to report any concerns.

Let the Trees **Help You Save**

Keep energy efficiency in mind as the ground warms and you plan spring landscaping. Properly selected and planted trees, shrubs and bushes can create a windbreak that lowers home heating bills in the winter and insulates your home year-round. Before you start, check on the right plants and techniques for your climate at energysavers. gov.

Source: U.S. Department of Energy



Save in the Shade

Properly installed shades can be one of the most effective ways to improve windows' energy efficiency. Lower them during the summer; in winter, raise them during the day and lower at night on south-facing windows. Dual shades, with reflective white coating on one side and a heat-absorbing dark color on the other, can be reversed with the seasons and save even more energy. Learn more at EnergySavers.gov.



Source: U.S. Department of Energy

In the Event of an Outage

- · Check breakers inside and outside the house to help determine if your service outage might be the result of a household problem.
- Check lights and appliances in other rooms. If you still have power in some areas, most likely a fuse or a circuit breaker in your house has blown. If all lights are off, check to see if neighbor's lights are also off.
- Call Trinity Valley EC and report the outage.
- · Always have alternate sources of light on hand. It could be a flashlight with extra batteries or candles. Keep your alternate light source in a place where it can be found easily.
- · Have a battery-powered radio available. The radio will bring you weather reports, local news bulletins and other important emergency information. 64515557002
- · Leave a lamp turned on to let you know when your electric service has been restored.
- Never touch downed power lines or anything contacting power lines. Call TVEC immediately if you come across one.



TVEC offices will be closed Monday, May 27, in observance of Memorial Day.

As always, crews will be standing by in the event of an outage or emergency. We wish you and yours a happy and safe holiday.

Win \$25 Just for Reading

Somewhere, hidden between Pages 20-25, is a TVEC account number. Read closely. If the account number is yours, contact the Member Services Department by May 30, 2013, to receive a \$25 credit on your electric bill. Don't miss out-you could be a winner.



Operating in Anderson, Dallas, Henderson, Hunt, Kaufman and Van Zandt counties

GENERAL MANAGER/CEO Jerry B. Boze

BOARD OF DIRECTORS

Howard Tillison, Chairman, District 6 Carolyn Minor, Vice Chairwoman, District 1 Jo Ann Hanstrom, Secretary, District 4 Jerry Priest, District 2 Paul Weatherford, District 3 Edward Reeve, District 5 David Lang, District 7

Kaufman District Headquarters

1800 E. Highway 243, Kaufman

Athens District Office 909 W. Larkin, Athens

Cedar Creek Suboffice

1012 W. Main St., Ste. 102 Gun Barrel City

Wills Point Suboffice

582 N. Fourth St., Wills Point

Lobby Hours

Monday-Friday, 8:15 a.m.-4:45 p.m.



Contact Us

For information during office hours and outages after hours

CALL US

(972) 932-2214 local or 1-800-766-9576 toll-free

24-HOUR AUTOMATED ASSISTANCE

1-800-720-3584

24-HOUR OUTAGE REPORTING 1-800-967-9324

FIND US ON THE WEB AT

tvec.net

Texas Division of Emergency Management

Hurricane Preparedness Guidelines Preparing for Hurricane Season: June 1- Nov.30



Evacuation Planning: When a hurricane threatens, listen for instructions from local officials. When they call for an evacuation in your area, get going without delay.

- Discuss evacuation plans with your family BEFORE hurricane season June 1 Nov. 30. Make a checklist of what you need to do before you leave town and review it.
- Monitor NOAA weather radio and local TV and radio broadcasts during storm season.
- · Prepare an emergency supply kit including: radio, flashlight, extra batteries, extra eye glasses, bottled water, non-perishable food, dry clothes, bedding, insurance information, important documents, medications, copies of prescriptions and special products for babies, the elderly and medically fragile family members.
- Learn evacuation routes before storm season. When there's a hurricane in the Gulf, keep your gas tank as full as possible. Expect traffic delays in an evacuation.
- Dial 2-1-1 to register if you have special health care needs or if you simply do not have transportation: Gulf coast residents in evacuation zones with special health care needs -who do not have friends or family to help -- should register in advance for a ride by dialing 2-1-1 in advance. Residents with no other transportation can register for a ride in advance by dialing 2-1-1.

Cool Savings

Your swimming pool doesn't have to be a drain on your electric bill. Simply covering it will go a long way to reducing evaporation, which will cut back on refilling and reheating. Also, consider investing in a high-efficiency pool pump when it's time for a replacement—they cost more but save a lot more energy than older models. Visit EnergySavers.gov for more info.



Source: NRECA's Cooperative Research Network

Where is your Co-op Connections Card?

The summers coming and that means your Co-op Connections card is ready and waiting to bring you great deals for vacation fun.

You can find discounts for your RV supplies at Seven Points Mobile Home Supply and Repairs and then head on down to Lakeshore RV Resort in Tool and recieve a great discount on rental space to park your RV. Enjoy the lake this summer and all the great local discounts that your Co-op Connections card has to offer.

Visit tvec.net to find out more about these local discounts plus many more. If you are interested in registering your business to offer a local deal, email Shannon Steakley at ssteakley@tvec. coop or call (469) 376-2152.

Win \$25 Just for Reading

Somewhere, hidden between pages 20-23, is a TVEC account number. Read closely. If the account number is yours, contact the Member Services Department by June 30, 2013, to receive a \$25 credit on your electric bill. Don't miss out-you could be a winner.



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24-HOUR AUTOMATED ASSISTANCE

1-800-720-3584

24-HOUR OUTAGE REPORTING 1-800-967-9324

FIND US ON THE WEB AT

tvec.net



Show Your Air Conditioner a Little Love

Even the best installed, most efficient HVAC equipment requires routine maintenance. Here are a few things YOU can do to maintain your HVAC system:

- Inspect the air filter monthly and replace it at least four times a year.
- Check the thermostat setting. A good starting point is 78 degrees in the summer and 68 in the winter. A programmable thermostat can save more by letting the home's temperature rise in the summer or fall in the winter by a few degrees when the house is unoccupied.
- Make sure the supply and return vents are open and not blocked by furniture.
- Keep your outdoor unit clean and make sure nothing blocks airflow to it.
 Here are maintenance points a licensed technician can do:
- Tighten all electrical connections.
- · Lubricate all moving parts.
- Inspect the air conditioner's condensate drain. 40188327001
- Check system's controls for wear or damage.
- Check system's refrigerant charge.
- Inspect ductwork for leaks.
- Adjust blower to provide proper airflow.

Summer Safety Tips

When the weather gets hot, we head outdoors for sun and fun. Keep in mind some tips from the Electrical Safety Foundation International to make sure everyone has a safe summer.

Water and electricity don't mix

Summer is the season for swimming and boating, and awareness of electrical hazards around water can prevent deaths and injuries. Water and electricity don't mix.

- ▶ Sailboats often have masts of 30 feet or more, which are dangerous when they come into contact with overhead power lines. Stay at least 10 feet away from overhead lines.
- ▶Use covers on outdoor power outlets, especially near swimming pools. Keep cords and electrical devices away from the water, and never handle electrical items before you've dried off.
- ▶ Use a ground-fault circuit interrupter to help prevent electrocutions and electrical shock injuries. These devices interrupt the flow of power when they sense a surge.



Keep little swimmers safe by keeping anything electrical far away.

Lightning and storms

Lightning strikes are fatal in 10 percent of

victims, and 70 percent suffer serious long-term effects, according to the National Weather Service. If you hear thunder, take cover.

- ▶ If weather conditions indicate a storm, stay inside—away from doors and windows—or seek shelter in a low-lying area away from trees and any metal, including sheds, clotheslines, poles and fences. If you're near water, stay as far away as possible.
 - ▶ If you're in a group, spread out—don't stand close together.
 - ▶ Unplug electronics before the storm arrives, and don't use corded phones.
 - ▶ Avoid plumbing—sinks, bathtubs, faucets.
- ▶Don't forget about your pets. Doghouses are not safe from lightning, and chained animals are easy targets.

Working with large appliances

If your air conditioner goes out, keep a few things in mind before you start poking around. Large appliances, such as air conditioners, are responsible for almost 20 percent of consumer-product electrocutions each year.

- ► Understand your electrical system—know which fuse or circuit breaker controls each switch, light and outlet.
- ▶ Make sure circuits are turned off before starting work and take measures to ensure that they're not turned back on while working.
 - ▶ Use a circuit tester—always test before you touch.

Source: SafeElectricity.org



Keep Your Cool

MESSAGE FROM
GENERAL MANAGER/CEO JERRY BOZE

When the Texas heat bears down, there's one appliance that rides to the rescue: your air conditioner. The widespread residential use of air conditioning is a relatively modern development. But today, I can't imagine life without it.

Cooling in the summer—and heating in the winter—accounts for a major portion of U.S. energy use. Close to 50 percent of all energy use is devoted to adjusting temperature levels, according to the U.S. Energy Information Administration.

In Texas in August, I imagine that this percentage is considerably higher.

In light of these numbers, I'd like to share with you some ways you can reduce air conditioning's effect on your power bill.

Change or clean the air filter regularly. This is probably the most important step you can take to increase efficiency and reduce the wear and tear on your central AC system. Your AC unit has to work harder to force air through a clogged filter. A filthy filter also allows dust and dirt to build up in your system. Changing your air filter regularly can reduce the need for costly maintenance, prevent damage to your system and lower your energy bill.

This advice applies to those who rely on window AC units as well. In addition, ensure that those units are properly weather stripped to prevent air leakage.

Use a programmable thermostat. A programmable thermostat will turn your temperature up automatically during times of the day you specify, such as when nobody's home. In fact, if properly set, they can take a significant chunk out of your cooling bill. But if you purchase one, it's important to program it—a step many people fail to take.

Luckily, programmable thermostats have become easier to use in the past few years. Newer ones can learn your usage patterns and automatically adjust temperatures without needing your intervention. Some can even be adjusted remotely with a smartphone or Internet connection. And with reduced power bills, the thermostats can pay for themselves in a matter of months.

Use fans wisely. An easy way to feel comfortable while setting the temperature up a couple of degrees is to use a fan. The air moving against your skin creates evaporation, which makes you feel cooler. Be sure to turn fans off when nobody is present. They are only effective when blowing directly on someone.

Draw blinds or shades during the day. Keeping the sun's heat out of a room will help it stay cooler. Open shades after sunset to allow heat to escape.

With a little effort, beating the August heat doesn't have to be painful. For more energy-saving tips, visit tvec.net.

It makes a lot of **cents** to Round Up

Operation Round Up

makes a lot cents. On average, members only contribute about 50 cents a month. That may not seem like much, but when over 40,000 TVEC members contribute, the pennies really add up.



Advanced Metering Status

TVEC is installing advanced meters to improve reliability, efficiency and service.

The fall deployment for Phase 3 of our advanced metering project is upon us. To date, over 37,000 advanced meters have been installed throughout the TVEC service territory, equal to 59 percent of our system.

Meter deployment will ramp back up in September and will take place in Henderson and Anderson counties. Our crews

will be in the following communities this fall: Walton, North Highway 19, Becks Chapel, Star Harbor, South FM 645, FM 320, West of Montalba, Bethel, Shady Oaks, Yard, Neches, Willow Springs and Carroll Springs.

The full project map—as well as much more information regarding the AMI project—can be found on the Advanced Metering page of tvec.net. If you have any questions or concerns, please give us a call at 1-800-766-9576.

Don't Let Your Home Leak Money

If your home is not properly sealed against air leaks, you could be causing your HVAC system to work harder than it has to and costing yourself money on your

You may already know where some air leaks occur in your home, such as an under-the-door draft, but you'll need to find the less obvious gaps to properly seal

For a thorough and accurate measurement of air leakage in your home, hire a qualified technician to conduct an energy assessment, particularly a blower door test. Such a test depressurizes a home to reveal the location of many leaks. Without a blower door test, there are ways to find some air leaks yourself.



Caulking around windows and doors can stop air leaks and help lower cooling bills.

Inspect around the following areas for cracks and gaps that could cause air leaks:

- Electrical outlets and switch
- Door and window frames
- Electrical and gas service entrances
- Baseboards
- Weatherstripping around
- Fireplace dampers
- Attic hatches
- Wall- or window-mounted air conditioners
- Cable TV and phone lines
- Wall openings for dryer vents
- Vents and fans

Also look for gaps around pipes and wires, foundation seals and mail slots. Check to see if the caulking and weatherstripping are applied properly, leaving no gaps or cracks, and are in good condition. Check the exterior caulking around doors and windows and see whether exterior storm doors and primary doors seal tightly.

Inspect windows and doors for air leaks. See if you can rattle them. Movement means

possible leaks. If you can see daylight around a door or window frame, then the door or window has leaks. You can usually seal these leaks by caulking or weatherstripping

Air leaks can waste a lot of your energy dollars. One of the quickest energy-and money-saving-tasks you can do is caulk, seal and weatherstrip all seams, cracks and openings to the outside.

Source: U.S. Department of Energy, energysaver.gov



Window awnings help keep indoor temperatures

Passive Cooling Reaps Rewards

There is a way to help yourself feel cooler and more comfortable without using energy at all. It's called passive cooling, and it's an old practice that can still work today. Passive cooling really involves keeping your home from getting hot to begin with, thus reducing the workload on your energy-powered cooling devices and systems.

One of the best ways to provide passive cooling is to plant trees. Tall, mature shade trees block the sunlight from beating down on your roof and windows, especially on the western side of your house, and can reduce indoor temperatures by 10 to 20

Keeping shades and curtains drawn on windows that take a lot of direct sunlight, especially from the south and west, can reduce the heat gain in your home. Exterior window awnings, porches and overhangs do an even better job of blocking heat than interior window coverings.

The hottest place in your home is the attic. If it isn't properly ventilated, the attic will heat up as high as 130 degrees, and some of that heat transfers to the interior of your home. Check your attic temperature on a hot day; if it's higher than 100 degrees, vou need more ventilation.

Controlling humidity will help keep you more comfortable, too. If your air-conditioning system doesn't dehumidify the air as well as it should, consider adding a new unit to replace or supplement it. Wait until cooler hours to do chores—such as washing and drying clothes, washing dishes and cooking-that add humidity to the air, and use ventilation fans in bathrooms and kitchens to help vent that extra moisture.



That old refrigerator may be retro and cool, but it's likely not energyefficient.

Is Your Old Refrigerator an

Energy Hog?

Does this sound familiar? You bought a new Energy Star-qualified refrigerator and moved your old fridge to the garage or basement to keep a few drinks cold. Here's a tip from TVEC that can help you save energy and money.

Old refrigerators, especially those more than 17 years old, tend to use a lot of energy. A refrigerator bought before 1993 uses more than twice as much energy as a new Energy Star refrigerator. So you're spending a lot of money to keep that refrigerator running. What's more, refrigerant deteriorates and seals start to leak over time, causing a decline in the performance of an older refrigerator.

If you have moved your old refrigerator to an uninsulated location, such as a garage, it will use even more energy during hot weather. A fridge in a 90-degree environment, for example, uses nearly 50 percent more energy than one in a 70-degree environment. And if the temperature falls below about 40 degrees in the winter, the refrigerator's thermostat may not run its cooling and defrost cycles for the needed amount of time.

So just by pulling the plug on that old fridge, you can lower your electric bill.

For other tips on how to save energy and money, visit TogetherWeSave.com or call the energy experts at TVEC. Find out how the little changes can add up.

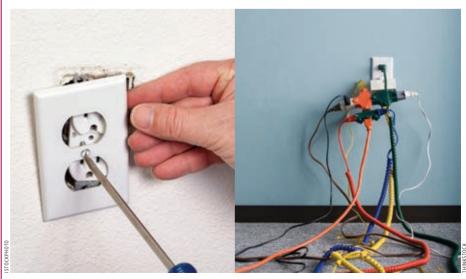
Pay Attention to Cords, Plugs and Outlets

Misuse of and malfunctioning electrical outlets and cords cause nearly 50,000 house fires every year, the National Fire Protection Association reports.

Keep your family safe by paying attention to how household members treat cords, plugs, appliances and outlets.

Some tips:

- ▶ If you notice an appliance cord is damaged, frayed, split or coming loose from its plug, don't use the appliance. Have the cord replaced or buy a new appliance.
- ▶ Don't leave an extension cord plugged in for more than a few days. It's not designed for permanent use. Move your lamps, electronics and appliances closer to wall outlets so you don't need extension cords. If you don't have enough outlets, hire an electrician to add more.
- ► When you use an extension cord, keep it in plain sight. Do not hide it under a carpet where it can get trampled on all day. If the cord overheats, it can catch the rug on fire.
 - ▶ Child-proof all receptacles so children won't stick their fingers into outlets.
- ▶ Don't plug more than one high-wattage appliance or electronic device into a single receptacle, even if using a multiplug power strip. The power strip doesn't add capacity to your electrical circuit. It just makes it easier to overload it, which can cause a fire.
- ▶ Avoid outlets and switches that heat up when used. Call an electrician to identify and solve the problem.
- ▶ If you trip a circuit every time you turn on your hair dryer or if your lights flicker or dim, that's a problem. Call an electrician.
- ▶ Find out which kind of lightbulb is safe for each table lamp in your house. You'll find information about maximum wattages if you look at the lamp socket.
- ▶ Install ground-fault circuit interrupters anywhere water can affect a circuit: the kitchen, all bathrooms, the laundry room, the basement and on outdoor electrical circuits. 1217001
 - ▶ Equip your home with arc-fault circuit interrupters, which can prevent a fire.



Left: Every outlet should have a properly fitted and securely mounted switchplate.

Right: An overload waiting to happen. Use power strips or have additional outlets installed.

Getting Ready for Winter

The early days of fall are a good time of year to start thinking about preparing your home for winter. As temperatures begin to dip, your home requires maintenance to keep it in tip-top shape and energy efficient.

Here are some tips to help you prepare your home for winter:

1) Furnace Inspection

- Call a heating, ventilation and air-conditioning professional to inspect your furnace and clean ducts.
- Stock up on furnace filters and change them monthly.
- Remove all flammable material from the area surrounding your furnace.

2) Get the Fireplace Ready

- Cap or screen the top of the chimney to keep out rodents and birds.
- If the chimney hasn't been cleaned for a while, call a chimney sweep to remove soot and creosote and repair any damage.





FROM TOP: Insulating water pipes reduces heat loss and can prevent pipes from bursting in extremely cold temperatures. If the insulation in your attic isn't up to par, take advantage of cooler temperatures to upgrade attic insulation for year-round comfort.

- Buy firewood or chop wood. Store it in a dry place away from the exterior of your home.
- ▶ Inspect the fireplace damper for proper opening and closing.

3) Check the Exterior, Doors and Windows

- ► Inspect exterior for crevice cracks and exposed entry points around pipes; seal them.
- Use weatherstripping around doors to prevent cold air from entering the home, and caulk windows.
- ► Replace cracked glass in windows and, if you end up replacing the entire window, prime and paint exposed wood.

4) Inspect Roof, Gutters and Downspouts

- Check flashing to ensure that water cannot enter the home.
- ▶ Replace worn roof shingles or tiles.
- ► Clean out the gutters and use a hose to spray water down the downspouts to clear away debris.
- Consider installing leaf guards on the gutters and extensions on the downspouts to direct water away from the home.

5) Check Foundations

- ▶ Rake away debris and vegetation from the foundation.
- Seal up entry points to keep small animals from crawling under the house.
- ➤ Seal foundation cracks. Mice can slip through spaces as small as 1/4 inch. 68378001
- ► Inspect sill plates for dry rot or pest infestation.
- Secure crawlspace entrances.

6) Prevent Plumbing Freezes

- Locate your water main in case you need to shut it off in an emergency.
- ▶ Insulate exposed plumbing pipes.
- ► If you go on vacation, leave the heat on, set to at least 55 degrees.

7) Prepare Landscaping and Outdoor Surfaces

- Plant spring bulbs that can survive winter and pull bulbs that cannot.
- ► Seal driveways, brick patios and wood decks.
- Move sensitive potted plants indoors or to a sheltered area for the winter season.

8) Prepare for Emergencies

- Buy candles and matches for use during a power outage.
- ► Keep TVEC's number—1-800-967-9324—on hand and call if you have an outage.
- Store bottled water and nonperishable food, supplies, blankets and a first-aid kit in a dry and easy-to-access location
- Prepare an emergency evacuation plan.

Efficient Holiday Cooking

Control energy costs while preparing celebratory meals

The U.S. Department of Energy estimates that cooking alone accounts for 4 percent of total home energy use, and this figure doesn't include the energy costs associated with refrigeration, water heating and dishwashing.

As holiday parties and meals gear up, keep these tips in mind to control energy costs:

Smart Oven Use

- ▶ Before the baking begins, clean the inside of your range, wiping accumulated grease and grime out of the oven and making sure the window is clean and clear so you can see what's cooking.
- ▶ Don't open the oven door to check on the progress of cooking food. Every time the door is opened, the temperature inside is reduced by as much as 25 degrees, forcing it to use more energy to return to the proper cooking temperature. Use the oven light and the window to look at the dishes.
- ► For recipes that need to bake longer than an hour, preheating isn't necessary.
- ▶ If you use a ceramic or glass dish for baking, you can typically set your oven for 25 degrees less than the



A clean oven is the first step to preparing an energy-efficient holiday dinner

recipe directs. Because ceramic and glass hold heat better than metal pans, your dish will cook just as well at a lower temperature. 30045587001

Stovetop Sense

- ► For your stovetop to function effectively, it's important that the metal reflectors under your electric stove burners stay dirt- and grime-free.
- ▶ Electric stovetops transmit heat to pans only by direct contact with burners. The less contact your pan has with the burner, the more energy the stovetop has to expend to heat the pan.
- ▶ If your pans have warped over time and don't sit flat on the burner, it may be time for a flat-bottomed update. To keep pans from warping, don't clean them while they are still hot. The temperature difference between the pan and wash water can deform the metal.

Think Small Appliances

▶ A slow cooker, microwave, toaster oven or warming plate can do the same job of cooking some dishes with less electricity. For example, the average toaster oven can use about half the energy of the average electric stove over the same cooking time.

Information to help you estimate how much energy your own appliances use is available on EnergySavers.gov.

Source: U.S. Department of Energy



An electric blanket can keep you cozy, but you should never sleep on top of one or let the kids jump up and down on it.

Make the Change of Season Safely

As the leaves change to their beautiful autumn hues and the weather gets colder, keep in mind the following electrical safety tips for the change of season:

- ► Check to see if electric blankets are in good repair and certified by an independent testing lab such as Underwriters Laboratories.
- ▶ Do not tuck your electric blanket under the mattress and don't put anything on top of the blanket. Do not allow pets to sleep on electric blankets.
- ► Check cold-weather tools, such as leaf blowers, to ensure that power cords are in good repair. Extension cords used with those tools need to be approved for outdoor use.
- ▶ Before you tackle fall tree trimming, be sure to look up and know exactly where overhead power lines are located so you can avoid them.
- ► If you have a fireplace, have the chimney cleaned before the start of the fire season

Source: Electrical Safety Foundation International

Usage History Reports Now Available in the Member Service Portal

In December of 2012, we introduced the TVEC Member Service Portal, a secure online tool that allows you to manage your account by making payments, setting up account alerts and reminders and view account history.

We recently extended the functionality of the Member Service Portal by adding a new feature to help you understand your energy usage a little better. This feature is available to members that have an AMI meter and can be found under the My Usage tab. It is your usage history in graphical format. You choose the date or dates that you wish to view, click the Retrieve Usages button and a graph of your daily energy usage appears.

Do you ever wonder how the weather is affecting your energy usage? Select an option from the Show Weather Data drop down and you will see daily temperatures overlaid on the usage history chart. You may see a correlation between temperature highs and lows and energy usage spikes.

Wondering how that home improvement project will affect your energy usage? Create a usage note on the day the project is completed and then compare your usage before and after to see the results.

For even more detail, select the View Hourly Usages drop down menu to see your hourly energy usage within the specified time frame. This is just another benefit of being a co-op member.





Remember you can also use the TVEC Member Service Portal to ...

- ▶ Chat online with a member service rep about your account.
- ▶ **Set** up alerts and reminders regarding your payment due date.
- ▶ View your payment history, billing history or billing statements.
- Make a payment.



Be creative this holiday season and fill your basket with energy-saving gifts.

Give the Gift of

Energy Efficiency

Is there someone on your holiday gift-giving list who could use help with their energy bills? Consider giving the gift of energy savings this year.

Here are some ideas for practical gift solutions that can help plug some common energy leaks:

VAMPIRE ELECTRONICS KILLER KIT: Pair a watt meter with a couple of higher-quality power strips in a gift basket. The recipient can use the meter to find the most energy-draining "always-on" electronics, then plug them into the power strips. That way, when the electronics are not in use, they can be turned off with one flick of a switch.

EFFICIENT COOKING PACKAGE: If someone you know loves to cook, help that chef prepare their meals more efficiently with a new slow cooker. Using that appliance instead of a stovetop could help decrease energy use in the kitchen. Pair the cooker with a selection of spices or a slow-cooker cookbook to make mealtimes more special.

COZY NIGHT: Combine a pair of slippers, a sweater and a lap blanket to give the gift of warmth for the winter. Warm clothing may allow the gift recipient to lower the thermostat. For every degree a thermostat is lowered in the winter, heating costs drop 1 to 5 percent, experts estimate.

THE GIFT OF LIGHT: Energy-efficient lights are a proven way to trim the costs of lighting, which consume about 12 percent of a typical home's electricity, according to Energy Star. Light-emitting diodes, or LEDs, are the most efficient and long-lasting of the bulb options available today. Choose Energy Star-rated bulbs, and perhaps throw in a strand of LED holiday lights, which can be used for years.

With a little creative thought, you can come up with your own combination of energy-efficient gifts that will be appreciated year-round.

Choose Electrical Toys with Care

Not every child is ready for powered playthings

If you are shopping for an electronic toy as a gift for a little one in your life, keep in mind safety recommendations by the Consumer Product Safety Commission.

The CPSC points out that plug-in toys and other electrically operated products intended for use by children can be hazardous if improperly used, operated without supervision, or not properly designed or constructed. Dangers of electric toys include not only the risks of electric shock and burns, but also other possible hazards, such as sharp edges or moving parts.

Before buying any toy, the CPSC recommends examining the packaging. It should tell you the recommended age group for which the toy is designed. That doesn't mean that a child of that age is automatically mature enough to play with the toy safely; you should consider the individual child's capabilities.



Toys should be safe and age appropriate.

You should also look for a mark from a recognized safety organization, such as UL. That mark means that the toy has undergone testing that certifies it is safe if used properly.

The CPSC recommends that a responsible adult supervise use of electronic toys. The amount of supervision required is a matter of judgment.

The agency also suggests that children be taught to always disconnect an electrical appliance after use by grasping the plug, not pulling on the cord. Also, electrical toys should always be used on circuits that have a groundfault circuit interrupter.

Source: U.S. Department of Energy



Displayed on TV's around our offices.



Look to your windows for energy savings. Use weather stripping on old windows, and, if you can, add storm windows. In hot climates, add solar film screening to west-facing windows to catch heat. For new units, consider double-glazed panes; in cold climates, "low-e" coatings on glass can help reduce heat loss. Find more ways to save at TogetherWeSave.com.

Source: Touchstone Energy® Cooperatives



Two degrees can make a big difference on your electric bill. Setting your thermostat 2 degrees Fahrenheit higher in summer and lower in the winter results in major energy savings. Investing in a programmable thermostat can save even more these devices automatically lower and raise your homes's temperature. Set it and forget it! Find more ways to save at TogetherWeSave.com.

Source: Touchstone Energy® Cooperatives



Keep energy efficiency in mind as the ground thaws and you plan spring landscaping. Properly selected and planted trees, shrubs, and bushes can create a windbreak that lowers home heating bills in the winter and insulates your home year-round. Before you start, check on the right plants and techniques for your climate at EnergySavers.gov.

Source: U.S. Department of Energy



Properly installed shades can be one of the most effective ways to improve windows' energy efficiency. Lower them during summer; in winter, raise during the day and lower at night on south-facing windows. Dual shades, with reflective white coating on one side and a heat-absorbing dark color on the other, can be reversed with the seasons and save even more energy. Learn more at EnergySavers.gov.

Source: U.S. Department of Energy



Your swimming pool doesn't have to be a drain on your electric bill. Simply covering it will go a long way to reducing evaporation, which will cut back on refilling and reheating. Also consider investing in a high-efficiency or multi-speed pool pump when it's time for a replacement—They cost more but save a lot more energy than older models. Visit EnergySavers.gov for more info.

Source: Cooperative Research Network



Lighting accounts for about 13 percent of the average household's electric bill—cut costs by choosing new light bulbs that have increased output and longevity. Some cost more up front, but prices are dropping as technology advances. Options include color, brightness, and even dimming and multi-way functions. Combining lights with automatic sensors can cut costs further.

Source: Cooperative Research Network



Your kitchen can yield big energy savings. Check the refrigerator door seal for a tight fit. Run only full dishwasher loads, and use the microwave rather than oven to reheat food and make small meals. Finally, unplug small appliances when not in use—many draw power even when turned off. Find more ways to save at TogetherWeSave.com.

Source: Touchstone Energy® Cooperatives



Your heat pump can use 10 percent to 25 percent more energy if it's not properly maintained, which includes regularly checking and replacing the air filter when it's dirty to keep parts from working too hard or even becoming damaged. Keep brush and plants tidy around the outdoor unit, and dust the return registers inside. For more details on heat pump maintenance, visit EnergySavers.gov.

Source: U.S. Department of Energy



Sleek new flat-panel TVs can consume almost as much electricity as a refrigerator. In general, the bigger the screen the more power it draws, and HD pulls more, too. Plasma screens use the most energy, while LCD TVs use much less. And remember to change your new TVs default settings to a power saver mode, and turn down the LCD backlight to save energy without sacrificing picture quality.

Source: Cooperative Research Network



Did you know a computer can draw as much electricity as a new refrigerator? Turn it off when not in use or switch on its energy-saving mode. Also, cell phone and mp3 player chargers as well as plasma TVs and entertainment centers pull power even when they're off. Unplug these and other appliances to save on your electric bill. Find more ways to save at TogetherWeSave.com.

Source: Touchstone Energy® Cooperatives



Using compact fluorescent lamps (CFLs) in outdoor lights can save money and energy because these lights stay on the longest. ENERGY STAR-qualified CFLs use 75 percent less energy than traditional incandescent bulbs. To save even more, look for fixtures designed for outdoor use that have automatic daylight shutoff and motion sensors. Learn more at EnergySavers.gov.

Source: U.S. Department of Energy

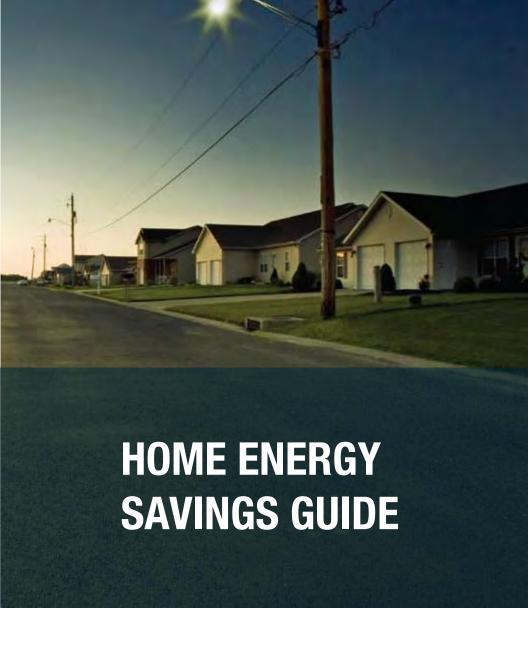


Appliances account for about 13 percent of your home's energy use. If they have energy-saving settings, use them. If they're nearing voting age, consider replacing them with a new, energy-efficient model. And remember to try smart power strips for smaller appliances and electronics that continue to draw power even when turned off. For more tips, visit EnergySavers.gov.

Source: U.S. Department of Energy

Brochures

Brochures are displayed in the lobbies of all four TVEC office locations





TOGETHERWESAVE.COM



TOGETHERWESAVE.COM

FIND OUT HOW THE LITTLE CHANGES ADD UP.

FLIP THE SWITCH. LOWER THE BLINDS. INSULATE YOUR ATTIC.
LOWER THE TEMPERATURE ON YOUR THERMOSTAT. THESE SOUND
LIKE SIMPLE TASKS. TAKE ALL OF THESE STEPS AROUND YOUR
HOME AND YOU CAN RACK UP BIG SAVINGS.

TOGETHER WE SAVE.

THIS HOME ENERGY SAVINGS GUIDE CONTAINS VALUABLE TIPS ON HOW TO IMPROVE YOUR HOME'S EFFICIENCY.

FOR MORE INFORMATION, PLEASE CONTACT YOUR LOCAL TOUCHSTONE ENERGY COOPERATIVE AND VISIT TOGETHERWESAVE.COM.

HOME ENERGY SAVINGS

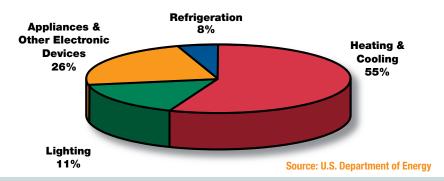
Your Touchstone Energy cooperative works hard to hold down energy prices. You, too, can play an important role in controlling your energy costs by evaluating your home and taking simple steps to trim unnecessary energy use. The following are some tips to help you reduce your energy costs.

HOME ENERGY COSTS

Get a clear picture of which parts of your home use the most energy.

- The first step in reducing home energy costs is to review last year's utility bills. Using the below national "percentage" averages, a homeowner who spent \$1,900 a year for home energy would have paid roughly:
 - \$1045 for heating and cooling
 - \$494 for appliances and other electronic devices
 - \$209 for lighting
 - \$152 for refrigeration
- When implementing energy-saving measures, remember, you cannot save more than you are spending.
- Contact your local Touchstone Energy cooperative to review your bills and receive a more accurate estimate. Go to TogetherWeSave.com for more information.

AVERAGE HOME ENERGY USAGE



HOME ENERGY SAVING TIPS

Assess how your family uses energy in your home.

- · Leaving unnecessary lights on increases energy costs.
- Turn off computers and other office equipment when they're not being used, especially overnight and on weekends.
- Heating your home to higher than 68° in the winter or cooling it below 75° in the summer costs more.
- Taking long showers runs up the water heating (and water/sewer) bills.

INSULATION

- If you have insulation in your attic graded at R-19 or less, consider bringing it up to R-38 in moderate climates and R-49 in cold climates.
- In cold climates, if you have floor insulation graded at R-11 or less, consider bringing it up to R-25.



WINDOWS

Windows leak heat. If you have single-pane windows, consider doing the following:

- Tighten and weather-strip your old windows and then add storm windows.
- Replace your old single-glazed windows with new double-glazed windows.
- In colder climates, "low-e" coatings on glass can help reduce heat loss through windows.
- In hot climates, consider adding solar screening to west-facing windows that catch a lot of heating late in the day. Solar screening is sold at many home improvement stores.

AIR INFILTRATION

Air that transfers in and out of homes through cracks, crevices and holes increases energy consumption. Here are some helpful tips to avoid air infiltration:

- Seal around pipe penetrations coming through walls.
- During hot and cold weather, ensure windows are closed tightly and locked.
- Ensure weather-stripping around doors and windows is tight.
- When your fireplace is not operating, its flue should be closed tightly, with a sign hanging from the flue handle warning it is closed.
- Check the ceiling behind the cornice of built-in bookshelves for holes cut during construction.
- Drop-down stairways should fit tightly into the ceiling and be carefully weather-stripped.
- Whole-house attic fans should be sealed tightly during the winter.
- Make sure your outside dryer vent door closes when the dryer is not in use.
 This requires cleaning away lint accumulation periodically.





REFRIGERATION

Trim your refrigerator's energy use.

- Make sure refrigerator and freezer seals fit tightly when doors close.
- Keep outside coils clean. Dirty coils make your refrigerator compressor work longer to remove heat.
- Setting your freezer below 0° uses extra energy.
- Setting your refrigerator below 37° uses extra energy.

HEATING & AIR CONDITIONING

Heating, ventilating, and air conditioning (HVAC) uses the largest chunk of your home energy dollar. Keep it running "lean and mean."

- HVAC systems should be checked to verify they are moving the correct amount of air. An HVAC technician can tell you if it is.
- Heat pump and air conditioning systems should be checked annually to verify they are properly charged, strictly in accordance with manufacturer guidelines.
- Inside and outside coils should be kept clean and free of debris.
- Gas furnaces should be tuned for maximum combustion efficiency.
- Return filters should be changed monthly.
- Have an HVAC technician check carefully for duct leaks. Leaks that are found should be sealed with fiberglass mesh and mastic sealant.





SELECTING A CONTRACTOR

Some of the work you will want to complete will require the services of a contractor. When selecting a contractor, keep in mind that the best price is not always the best value. Here are some questions to ask when deciding who to use:

- How long have you been in business?
- Can you provide proof that you are state-licensed and carry workers' compensation insurance?
- Can you provide the names of neighbors who have used your services?
- Are you a member of the Better Business Bureau?

NOTES:



TOGETHERWESAVE.COM

FOR MORE INFORMATION ON ENERGY SAVINGS CHECK WITH THE FOLLOWING SOURCES:

- VISIT TOUCHSTONEENERGY.COOP FOR INFORMATION AND TO LOCATE YOUR LOCAL TOUCHSTONE ENERGY COOPERATIVE.
- U.S. DEPARTMENT OF ENERGY ENERGY.GOV/YOURHOME.HTM
- ENERGY STAR ENERGYSTAR.GOV
- ALLIANCE TO SAVE ENERGY ASE.ORG
- YOUR STATE'S ENERGY OFFICE.













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FIND OUT HOW THE LITTLE CHANGES ADD UP AT TOGETHERWESAVE.COM.



WATER HEATING

- 1. Set water heater temperature no higher than 120°F.
- 2. For households with 1 or 2 members, a 115°F setting may work fine.
- 3. Install water-heater wrap per manufacturer's instructions.
- 4. Drain 1-2 gallons from bottom of water heater each year to reduce sediment build up.
- 5. Install heat traps on hot and cold water lines when it's time to replace your water heater.
- 6. Insulate exposed hot water lines.
- 7. Limit shower length to 5-7 minutes.
- 8. Install low-flow shower heads.
- 9. Fix dripping faucets.
- 10. Don't let water run while you are shaving.
- 11. Don't let water run while brushing your teeth.



LAUNDRY

- 12. Wash clothes in cold water. Use hot water only for very dirty loads.
- 13. Only do full laundry loads.
- 14. If you must do smaller loads, adjust the water level in the washing machine to match the load size, especially when using hot water.
- 15. Always use cold-water rinse.
- 16. Use bath towels at least twice before washing them.
- 17. Clean your dryer's lint trap before each load.
- 18. Make sure the outdoor dryer exhaust door closes when the dryer is off.
- 19. Verify dryer vent hose is tightly connected to inside wall fitting.
- 20. Check that the dryer vent hose is tightly connected to dryer.
- 21. Make sure dryer vent hose is not kinked or cloqued.
- 22. Minimize clothes drying time; use moisture sensor on dryer if available.
- 23. Dry consecutive loads to harvest heat remaining in dryer from last load.
- 24. Consider using a "solar-powered" clothes dryer, an old fashioned clothes line.

KITCHEN

- 25. Use your refrigerator's anti-sweat feature only if necessary.
- 26. Switch your refrigerator's power-saver to "ON," if available.
- 27. Clean refrigerator coils annually.
- 28. Set the refrigerator temperature to 34° 37°F and freezer temperature to 0° 5°F.
- 29. Ensure gaskets around door seal tightly.
- 30. Unplug unused refrigerators or freezers.
- 31. Use microwave for cooking when possible.
- 32. When cooking on the oven range, use pot lids to help food cook faster.
- 33. If you are heating water, use hot tap water instead of cold.
- 34. Remember to use the kitchen exhaust fan when cooking and turn it off after cooking.
- 35. Use a crockpot instead of simmering foods on the stove.
- 36. If rinsing dirty dishes before putting them into the dishwasher, do so with cold water.
- 37. Use cold water for garbage disposal.
- 38. Only run dishwasher when fully loaded.
- 39. Use air-dry cycle instead of heat-dry cycle to dry dishes.

LIGHTING

- 40. Replace any light bulb that burns more than one hour per day with its equivalent compact fluorescent bulb.
- 41. Turn off unnecessary lighting.
- 42. Replace outdoor lighting with its outdoor-rated equivalent compact fluorescent bulb.
- 43. Use fixtures with electronic ballasts and T-8, 32-watt fluorescent lamps.
- 44. Use outdoor security lights with a photocell and/or a motion sensor.

MISCELLANEOUS

- 45. Turn computers and monitors off when not in use.
- 46. Make sure electric blankets are turned off in the morning.
- 47. Turn waterbed heater off when not needed.

48. Turn large-screen TV's off completely when not in use.

- 49. Turn off stereos and radios when not in use.
- 50. Remember to turn off hair curling irons and hot rollers.
- 51. Turn off coffee makers when not in use.
- 52. Turn off pool pump and/or heater when not needed.
- 53. Verify livestock water tank heaters are off when not needed.
- 54. Make sure heat tape is off when not needed.
- 55. Unplug battery chargers when not needed.
- 56. Ensure all new appliances purchased are Energy Star approved.





- 57. Set thermostats to 78° F in summer, 68° F in winter.
- 58. Run ceiling paddle fans on medium, blowing down in summer.
- 59. Run ceiling paddle fans on low, blowing up in winter.
- 60. Change HVAC filters monthly.
- 61. When installing new air filters, make sure they are facing in the correct direction (look for arrow on side of filter).
- 62. When heating or cooling, keep windows locked.
- 63. Insulate electric wall plugs and wall switches with foam pads.
- 64. Caulk along baseboards with a clear sealant.
- 65. Close fireplace dampers when not burning a fire.
- 66. Caulk around plumbing penetrations that come through walls beneath bathroom and kitchen sinks.
- 67. Caulk electrical wire penetrations at the top of the interior walls.



80. Have your HVAC system serviced once per year by

a NATE-certified technician.

- 81. Monitor your home's relative humidity in the summer. If it consistently stays in the 60 percent range or higher, ask your HVAC technician about lowering your central air conditioning unit's indoor fan speed.
- 82. Ensure window A/C units are weather-stripped.
- 83. Ensure windows with window mounted A/C units have weather-stripping between the middle of the top and bottom pane.
- 84. Remove and clean window A/C filter monthly.
- 85. Keep "fresh-air" vents on window A/C units closed.
- 86. Use heavy-duty, clear sheets of plastic on the inside of windows to reduce the amount of cold air entering your home.
- 87. Minimize use of electric space heaters.
- 88. Ensure your outdoor heat pump/air conditioning unit is kept clean and free of debris.
- 89. When using the fireplace, reduce heat loss by opening damper in the bottom of the firebox (if provided) or open the nearest window slightly.
- 90. In a basement, seal the sill and band joist with durable caulking or foam sealant.
- 91. Ensure floor registers are not blocked with rugs, drapes or furniture.
- 92. Outside your home, caulk around all penetrations including telephone, electrical, cable, gas, water spigots, dryer vents, etc.
- 93. Caulk around storm windows.
- 94. Caulk around basement windows.

- 95. Verify your supply air duct "boots" (behind supply air registers) are caulked to your ceiling or wall sheetrock or flooring.
- 96. If in unconditioned space, verify your ducts are tightly connected to your HVAC equipment.
- 97. Verify all outdoor doors (including storm doors) close and seal tightly.

98. In two-story homes serviced by one HVAC system, a paddle fan at the top of the stairs can push down hot, second-floor air.

99. Install 15 minute, springwound timers on bathroom ventilator fans.

100. Always run your HVAC system fan on "AUTO." Running it on "ON" uses more electricity and can decrease your air conditioner's ability to remove moisture.

101. Keep your garage door down.
A warmer garage in the winter and cooler garage in the summer will save energy.







LIGHTING and HEATING AND COOLING



LIGHTING

- By replacing incandescent lights with fluorescent lights nearly four times as much light per watt can be produced and last 9 to 12 times as long.
- Keep light fixtures clean. Dust can absorb up to 20 percent of emitted light.

HEATING AND COOLING

- Programmable thermostats can be programmed to meet your family's life style. The thermostat will turn heat down automatically when you depart and up again when you return.
- In the summer fans can be used to circulate the air to make you feel cooler and used in the winter on reverse cycle to pull the heat down from the ceiling and circulate to make you feel warmer.
- Set thermostat at 78 degrees in the summer and 68 degrees in the winter.
- Insulate and tape ductwork
- Annual "checkup" for system
- · Monthly filter cleaning or replacement
- Heat is constantly lost or gained in a home 30 percent through the attic and 10 percent each through wall and floors
- Since heat moves from hot to cold areas, the idea of insulation is to create a barrier of resistance. The greater the R-factor, the better insulating power. Recommended R-factor is 30 for ceilings and 11 for walls.
- If the attic has 4 or more inches of insulation, added insulation is not vital. If there is less or no insulation, consider adding 6 to 9 inches of batt or blanket insulation or 6 to 12 inches of blown-in insulation.

ENERGY tips from



Additional Lighting and Heating and Cooling Tips

THICKNESS IN INCHES FOR INSULATION TO OBTAIN R-VALUES*							
	BATTS or BLANKETS		LOOSE and BLOWN FILL				
R-Value	Fiberglass	Mineral Wool	Fiberglass	Cellulose	Vermiculite		
R-11	4-51/4	$3^{1/4} - 3^{3/4}$	4	33/4	5 ¹ / ₂		
R-19	$7 - 8^{3}/4$	53/4-61/4	8	6 1/2	9		
R-30	11 – 14	9-91/2	12	10 1/2	14 1/2		
R-38	$14 - 17^{3}/4$	$11^{-1/2}-12$	17	13	18		

*Consult the manufacturer's recommendation for applications. Specific products may deviate from these nominal thicknesses, and specific R-values depend on material density and aging.

Source: U.S. Department of Energy

Recommended R-Values for Existing
Houses in
Four
Insulation Zones

•	R-Values			
Zone	Ceiling	Walls	Floor*	
1	38	11	19	
2	30	11	19	
3	30	11	0	
4	19	11	0	

*Floors over unheated crawlspaces and basements.

Source: U.S. Dept. of Energy

INSULATION CHECKLIST Check with electric cooperative

 Inspect current insulation for type, condition, and level

for R-level recommendation

- Inspect vapor barriers
- Add appropriate type of insulation to bring to recommended R-level
- Keep insulation at least three inches from heat producers

FIREPLACE CHECKLIST

- ☐ Add glass fireplace doors and keep them closed
- ☐ Check damper fit (insulate in summer) and keep closed when not using fireplace
- □ Check into alternatives: outside air vent, fireplace inserts, circulation systems, etc.
- ☐ Keep ash box clean, especially if outside, to provide air source.

ENERGY STOR RENTERS from TRINITY VALLEY ELECTRIC CO-OP

Whether you pay for utilities yourself or they are included in your rent, you pay for them. That's why it's important to learn how much energy you use and how to save. If you pay for your utilities directly, there are many simple suggestions in this tips sheet to help you save on electricity and gas.

If your landlord pays for utilities and they're included in your rent, take the steps recommended to avoid wasting energy. If you save, you reduce the landlord's cost of operation and that can help prevent rent increases.

COOLING AND HEATING

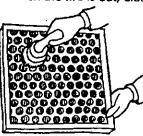
The easiest way to save is to set your thermostat up to 78 degrees during the summer and down to 65 degrees for winter days and 55 degrees for winter nights. Thermostat set-up and set-back can save from 9 to 15 percent of your cooling and heating bills.

Summer Cooling

- Use fans to supplement your air conditioner. Air movement allows you to set your thermostat 6 to 8 degrees higher and maintain the same comfort level.
- Keep the sun's heat out of your home by lowering shades or closing drapes and curtains.
- When outdoor temperatures are more pleasant, turn off the air conditioner and open the windows to take advantage of natural breezes. Fans again will make you feel more comfortable.
- Dress in light, loose, comfortable clothing.

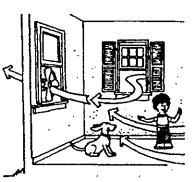
Winter Heating

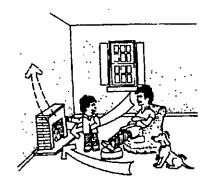
- Use the sun to heat your apartment. Open curtains and shades when the sun is shining, and close them at night or on overcast days to keep out the cold.
- Wear warm clothing. This may include sweaters, socks, shawls, and/or long underwear. Wear several layers of clothing.
- Use your fireplace sparingly. In a typical, open-hearth fireplace, about 85 to 90 percent of the firewood's heating value is lost up the chimney in the form of hot combustion flue gases. In addition, heated room air is drawn out of the living space to keep the fire burning.
- When the fire is out, close the flue damper.



Year 'Round

- Seal cracks around windows and doors with inexpensive weatherstripping.
- Change or clean filters on air handling systems regularly. Dirty filters can cause excessive wear on your cooling and heating circulation system, reduce cooling or heating efficiencies, and increase the amount of energy needed to cool or heat your home.





Saving energy is easy...

APPLIANCES

Major appliances account for 20 to 30 percent of all the energy used in the home, whether that's a house or an apartment. So, it will pay to take the following advice.

Water Heating ..

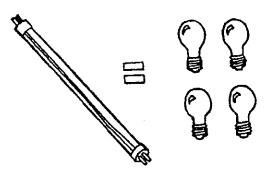
- Check the temperature of your hot water. If it's above 140 degrees, you can save energy by simply lowering the thermostat setting on the water heater. For most purposes the medium setting should provide sufficiently hot water.
- Have the landlord replace washers on leaky faucets to save hot water.
- When washing dishes in the sink, plug the sink and fill it with water instead of letting water run constantly.
- If you use a dishwasher, stop the machine before it gets to the dry cycle and let dishes dry in the air. Run the dishwasher only when full, and if it has an energy-saver cycle, be sure to use it.
- A 4-minute shower uses less water than a bath. Put a flow restrictor in your showerhead and save even more by cutting water flow from 8 gallons a minute to 2 or 3 gallons per minute.

Food Preparation and Storage

- Toaster ovens, microwave ovens, and slow cookers use less energy than the range-top or oven.
- When you use the oven, bake several items at the same time. Preheat for only 5 minutes (or not at all) and turn off the oven 10 minutes ahead of time.
- Open the refrigerator door as little as possible and close the door quickly. A list of snack food posted on the outside of the refrigerator door helps end refrigerator stare.
 - For oven-cooked meals, turn heat off for the last 10 minutes.
 - Clean burner pans often so they reflect more heat.
 - Boil only the amount of water you need.
 - Allow hot foods to cool to room temperature before refrigerating or freezing them.
 - Keep commonly used items in a handy place near the front of the refrigerator.
 - Except he oven door closed rather than opening it to look in.
 - Use the right size pan for each burner.
 - Keep the freezer as full as possible to save energy.
- When you cook on the range, a cover on the pot will save a third of the energy used without a cover.
- Bake in ceramic or glass instead of metal and you can set your oven thermostat 25 degrees lower on any given recipe.
- Defrost the freezer when the ice is a quarter of an inch thick. More ice on the walls begins to act like a layer of insulation and decreases the efficiency of the freezer.

Lighting and Small Appliances

- Always turn off lights and small appliances when you're not using them.
- Choose light colors when you or your landlord paint. Light-colored walls reflect light so that you need less artificial light.
- Use energy-saver light bulbs that require 10 percent less electricity.
- Use lower wattage bulbs wherever possible and use fluorescent lights when you can. They are 3 to 5 times more efficient and last up to 12 times longer. New compact fluorescent bulbs are now available for use in table lamps and other fixtures designed for incandescent bulbs. Plus, you can take your more efficient bulbs with you when you move.





MORE INFORMATION

For more information concerning other energy topics or answers to specific energy-related questions contact

P.O. BOX 888, KAUFMAN, TEXAS 75142 1800 HIGHWAY 243 EAST PHONE: (972) 932-2214, (800) 766-9576, METRO: (972) 962-5997

for LANDLORDS APARTMENT MANAGERS

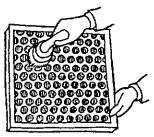
from TRINITY VALLEY ELECTRIC CO-OP

If you are an apartment manager or a landlord, you know that energy consumption can account for a large portion of operating expenses, particularly if the tenants' utilities are included in the rent. If tenants pay their own utility bills, you still may have to pay for energy supplied to common areas such as pools, laundry rooms and parking lots.

This tips sheet contains suggestions on how you can reduce energy use in and around your rental units. By following these tips, you can help keep utility bills and related rent increases under control and make your rental units more comfortable places to live.

Cooling

- Install ceiling fans in all units.
- Change or clean filters on air-handling. systems regularly. Dirty filters can cause excessive wear on your cooling and heating circulation system and increase the amount of energy

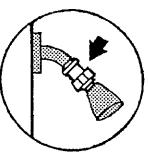


needed to cool or heat the units.

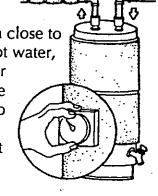
■ Add exterior shading to decrease heat gain through windows and to help air conditioner compressors run more efficiently.

Equipment

■ Install flow restrictors on faucets and shower heads to save water. Low-flow shower heads cut water flow from 8 gallons per minute to 2 or 3.



■ Consider installing energy-saving water heaters and put them close to the greatest use of hot water, usually the kitchen or laundry room. Set the temperature at 120 to 130 degrees F, or medium, and suggest to tenants that they leave it there.



- Install an aerator in kitchen sink faucets. An aerator reduces the amount of water in the flow.
- Replace the washers on leaky faucets to conserve water.
- Consider installing heat pumps if your source of energy for heating is electricity. They use about half as much energy as electric resistance heating.

Painting

■ Paint the exterior of the rental units according to climate. For example, painting a building white helps it reflect more of the sun's radiant heat.

Choose light colors when painting the interior of the units. Light-colored walls reflect light so that less artificial light is needed.

Appliances

- Be energy conscious when buying appliances for a rental unit. Compare energy-use information and operating costs of similar models. Although more efficient appliances may cost more initially, they will cost less to operate and may last longer.
- Keep in mind when shopping for ranges that an electric range uses 1 kilowatt-hour per meal, about 7¢ or 8¢ worth. A gas range uses about 6¢ worth of gas per meal.
- Install the refrigerator away from heat sources, such as the stove, dishwasher or direct sunlight.
- Keep appliances in good working order. They will last longer, operate more efficiently and use less energy.
- Choose a gas range that has an electric ignition. A pilot light uses 11¢ worth of gas every day.
- Consider purchasing automatic dishwashers: An efficient automatic dishwasher can consume less energy than washing dishes by hand.

Lighting

- Replace incandescent lights with fluorescent lights in kitchens, bathrooms and laundry rooms.
 Fluorescent lights produce nearly four times as much light per watt as typical incandescent lights and last 9 to 12 times as long.
- Consider installing lighting timers on outside lights. Timers turn lights on and off automatically at pre-set times.

Washer/Dryer

- If you have central laundry rooms in a rental complex, be sure to keep the dryers' lint traps clean. A dirty lint trap slows the flow of air in the dryer so it takes longer and uses more energy to dry laundry.
- If there are washer/dryer connections inside the units, dryers should be vented outside to avoid adding excess moisture to the inside air.

Swimming Pools

- Clean the skimmer and pump-strainer baskets frequently.
- Follow the manufacturer's recommendations for servicing the filter.
- Keep the pool thermostats at 80 to 82 degrees F or below, and operate the pool heater only when the pool is being used.



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The following tips will help you make your home energy efficient, safe and a more comfortable place to live. By following these simple tips you can be health wise and energy conscious.

Weatherizing

- Put a draft stopper along cracks beneath doors and windows.
- Place movable insulation in windows to block heat gain during the summer and keep the heat indoors during the winter.
- ■Caulk and weatherstrip around doors and windows to prevent air leakage.
- Install inexpensive gaskets around light switches and electrical outlets to seal against air leaks.
- Control your home's inside temperature with existing curtains, drapes or blinds. Open them in the winter to let warming sunlight in and close them in the summer to keep the heat out.
- Change or clean your heating/cooling unit's filter about once a month when the unit is operating.

Water Heating

- Look for and repair leaky faucets.
- Check your water heater thermostat setting. If the thermostat is set between 140 degrees F and 160 degrees F, or "high", you can reduce the setting to between 110 degrees F and 120 degrees F, or "medium", and save at least \$20 a year with an electric water heater or \$10 a year with gas. The lower thermostat setting can also prevent scalding.
- Replace your shower head with a low-flow shower head. It can reduce the flow of water from 8 gallons to 3 gallons per minute, and save up to 4,000 gallons of hot water a year.
- Run your dishwasher and washing machine only when they are fully loaded.

Save even more hot water by using a coldwater laundry detergent so you can wash and rinse with cold water. Normally only very greasy clothes need to be washed in warm or hot water.

Lighting

- Replace two bulbs with one bulb that produces a similar amount of light. For instance, you could replace two 60-watt bulbs with one 100-watt bulb. However, be sure that the fixture is rated to use the higher wattage bulb.
- Change to fluorescent lamps wherever possible by replacing the entire fixture or by changing from incandescent to compact fluorescent bulbs. The initial cost of a compact fluorescent bulb is more than an incandescent bulb, but it can last up to 12 times longer and produce less heat, which will reduce the load on your air conditioner.
- Keep light fixtures clean. Dust can absorb up to 20 percent of emitted light.

Cooking

- Cook several foods at one time when using your oven. Prepare dishes that can be stored or frozen for later use.
- Bake food in glass pans. Glass pans allow you to reduce the oven temperature by 25 degrees.
- Use small cooking appliances, such as deep fryers, electric skillets, toaster ovens, microwave ovens and pressure cookers. These appliances use less energy than your range or oven.

- Match the size of the pan to the heating element when cooking on the stove. More heat will get to the pan and less will be lost to the surrounding air.
- Place lids on pots when cooking to retain the heat. This will help your food cook faster and keep vitamins from going up in steam.

Winter Tips

To save energy and money during the winter, set the thermostat at about 70 degrees F during the day and at night. For older adults, it's important to avoid the possibility of hypothermia, or lowering of the body temperature. This condition develops when body heat is lost faster than it can be replaced and is particularly common in winter. Because hypothermia can come on gradually, watch for these telltale signs: stiff muscles, shivering, puffiness in the face, or poor coordination. Some tips to save energy and avoid hypothermia include:

- Insulate your home properly.
- Dress warmly.
- Cover your legs with a blanket when reading or watching TV.
- Add an extra blanket at night.
- Avoid prolonged exposure to the cold.
- Get proper rest and drink plenty of fluids.

Summer Tips

To save energy and money during the summer, set your thermostat at 78 degrees F. In addition, guard against hyperthermia, or heat stress, which is a sudden increase in the body temperature. Heat stress can lead to heat exhaustion, heart failure or stroke. Some of the warning signs to watch for include dizziness,

rapid heartbeat, diarrhea, nausea, cramps, or dry skin. Blistering Texas summers make heat stress a concern of the elderly. Some tips to save energy and avoid hyperthermia include:

- Dress in cool, loose-fitting clothes that are light in color.
- Wear a hat when you are outdoors or take an umbrella to protect your head and neck.
- Make use of fans; they help to keep the air circulating and aid to remove excess body heat.
- Keep physical activity to a minimum during the hottest part of the day.
- Drink plenty of fluids (check with your doctor).



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